

**Volume A –
Project Framework**

FINAL REPORT

RioTinto

Social and Environmental Baseline Study

Simandou Project – Mine Component



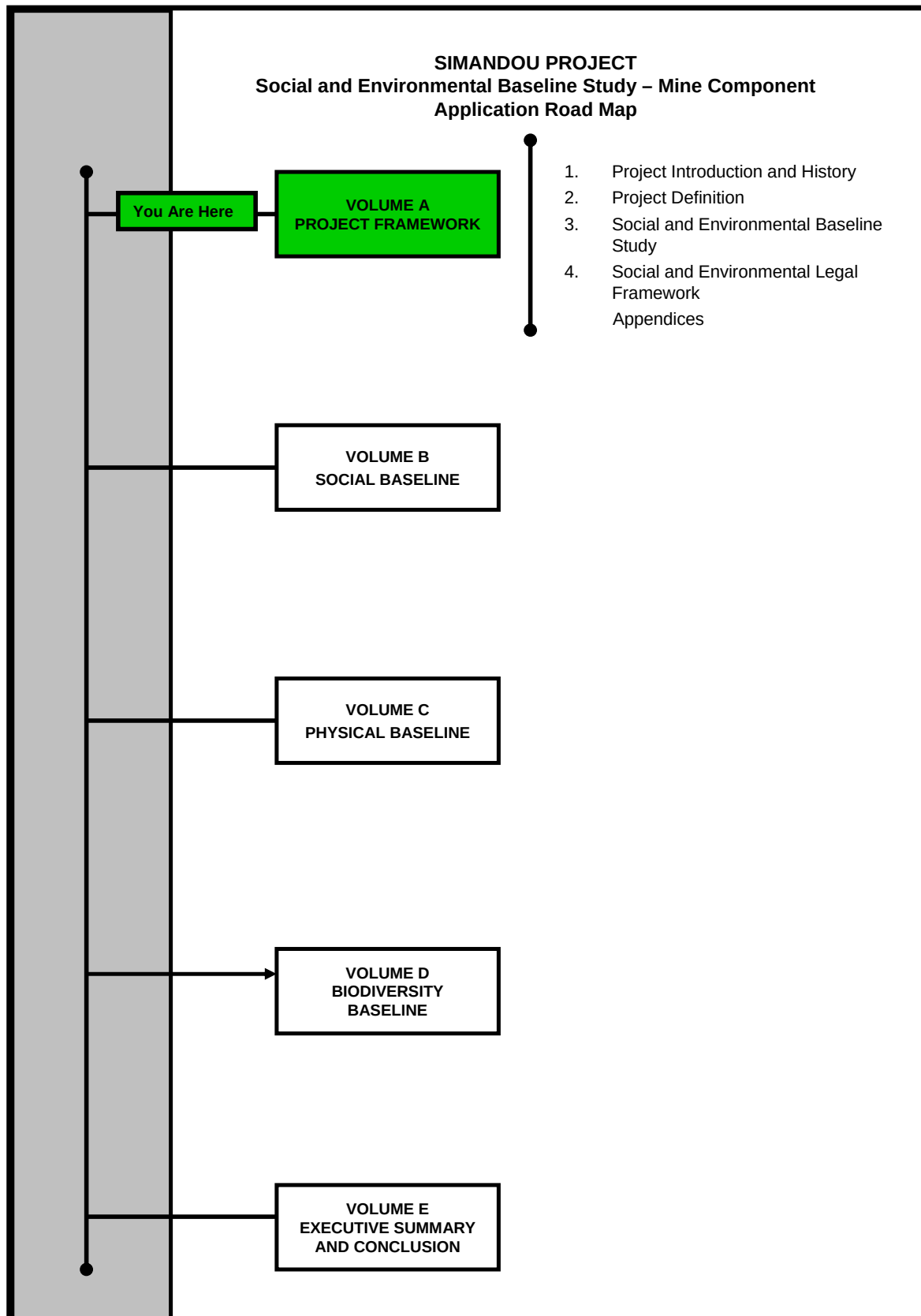
Project No.: 604917

August 2010



**SNC•LAVALIN
Environment**

REPORT ROAD MAP



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GLOSSARY

ACRONYMS AND ABBREVIATIONS

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CHAPTER 1

Project Introduction and History

1. PROJECT INTRODUCTION AND HISTORY

1.1 PROJECT INTRODUCTION

Simfer S.A., a wholly-owned subsidiary of Rio Tinto and the International Finance Corporation (IFC)¹, is evaluating the feasibility of mining a large iron ore deposit located in the southern portion of the Simandou mountain range, in southeastern Republic of Guinea. The objective is to establish a world-class, high-grade iron ore resource within the mining concession. Rio Tinto is currently carrying out an advanced exploration programme and project development studies on the Simandou Project.

The resources under study are high-grade hematite with potential to support a large-scale mining operation and a recoverable resource of some 2 billion tonnes from the Pic de Fon and Ouéléba deposits. A Trans-Guinean railway will be required to transport the iron ore from the Simandou mining concession to a new deepwater port to be built to the south of Conakry. The exact location of the port and the railway route is being determined through a number of ongoing studies.

Within the context of the project development studies, this report presents the detailed Social and Environmental Baseline Studies (SEBS) for the mine component of the Simandou Project. The SEBS is the precursor to the full Social and Environmental Impact Assessment (SEIA) that will be conducted at a later date. Rio Tinto assigned SNC-Lavalin Inc., Environment Division (hereafter called SNC-Lavalin Environment (SLE)) to carry out the SEBS.

This document was prepared in accordance with the Terms of Reference (ToR) for the SEBS of the Simandou Project (SNC-Lavalin Environment 2008) and IFC requirements. The ToR have been reviewed and approved by the National Monitoring Committee set up for the Simandou Project's SEIA.

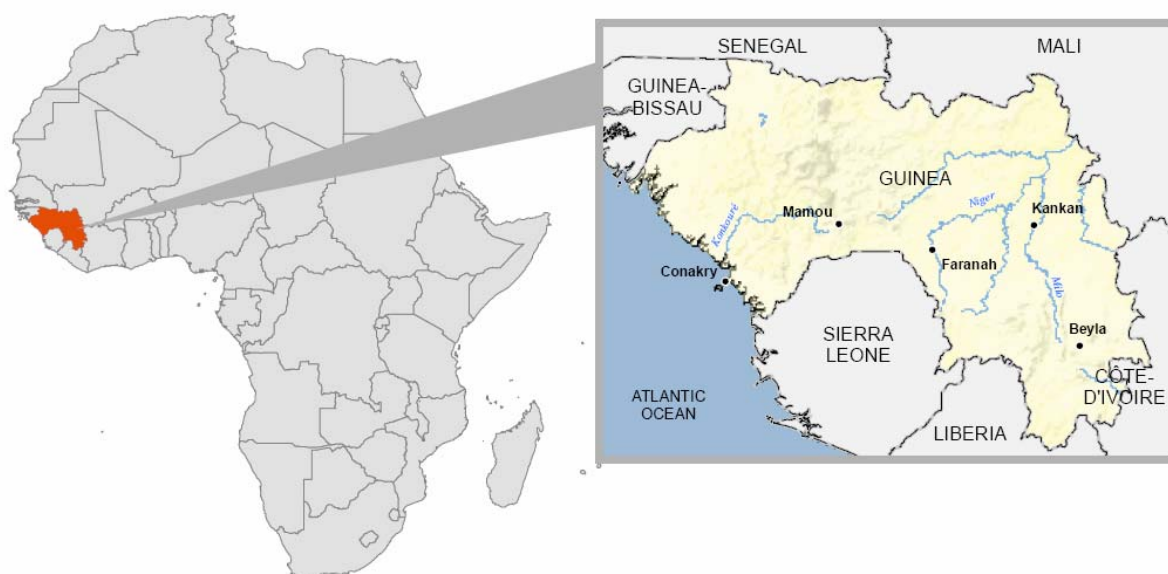
The project must comply with the applicable legislative framework of Guinea, with Rio Tinto's applicable policies, standards, guidelines and strategies (Rio Tinto 2010), and with the IFC *Performance Standards for Social and Environmental Sustainability* (IFC 2006a), the *Policy on Disclosure of Information* (IFC 2009a) and the new IFC Environmental, Health and Safety Guidelines (IFC 2010).

1.2 PROJECT LOCATION

The Simandou Project is located in the Republic of Guinea (Guinea), a West African country covering an area of almost 246,000 km². Guinea forms a crescent that curves from its western border on the Atlantic Ocean towards the east and the south (Figure 1.1). Guinea shares its northern border with Guinea-Bissau, Senegal and Mali, and its southern border with Sierra Leone, Liberia and Côte d'Ivoire. The Niger River has its source in Guinea and flows eastward.

¹ Rio Tinto – Simfer S.A. with 95% ownership; IFC with 5%.

Figure 1.1 Project location



The Simandou Project includes three components: i) the infrastructure required to operate a large scale iron ore mine in the Simandou Range in southeastern Guinea; ii) a new deepwater port south of Conakry in the Forécariah prefecture; and iii) a Trans-Guinean railway to transport the ore from the concession to the Guinea coast, passing through numerous prefectures. Figure 1.2 shows the locations of the three project components.

Figure 1.2 Locations of the Simandou Project components



1.3 PROJECT OWNERSHIP

The Simandou mining concession is held by Simfer S.A. a Guinean registered company that is 95% owned by Rio Tinto Iron Ore Atlantic Limited, a wholly owned subsidiary of Rio Tinto Holdings, with the remaining 5% share owned by the International Finance Corporation (IFC). Under the Mining Convention, the Government of Guinea has the option to acquire up to 20% of the share capital of Simfer S.A. at a commercial rate when a development decision is taken.

Rio Tinto is one of the world leaders in locating, mining and processing the earth's mineral resources—metals and minerals that are essential for making thousands of everyday products that meet society's needs and contribute to improved living standards. Its activities span the globe and its products include aluminum, copper, diamonds, gold, energy products (coal and uranium), industrial minerals (borax, titanium, dioxide, salt, talc and zircon) and iron ore. Rio Tinto is a modern-day business committed to serving all of its stakeholders in accordance with the very best practices in safety, business ethics, social and environmental responsibility, and sustainable development.

The IFC is the private arm of the World Bank Group. It promotes sustainable private-sector investment in developing countries and helps to reduce poverty and improve people's lives. The IFC's objective in the Simandou Project is to help Rio Tinto study and implement a mining project that makes maximum use of its sustainability credentials. Through its participation, the IFC is expected to help mitigate country risk, particularly given its role as a member of the World Bank group and as the largest multilateral source of loan and equity financing for private-sector projects in the developing world.

1.4 SUSTAINABLE PROJECT DEVELOPMENT OBJECTIVES

Rio Tinto's Sustainable Development policy states that "Rio Tinto businesses, projects, operations and products should contribute constructively to the global transition to sustainable development." In keeping with this policy, Rio Tinto has established a project policy that is the international benchmark for resource management in developing countries.

Simandou will be a flagship iron ore operation within the Rio Tinto group by demonstrating health, safety and environmental leadership in a developing country. Sustainable benefits will be achieved in partnership with the people of Guinea.

The policy vision is to maximise sustainable benefits and contribute to regional development in partnership with the Government of Guinea. This will be achieved by focusing on economic prosperity, social well-being, environmental stewardship and corporate governance. Rio Tinto believes that achieving the following goals is a fundamental part of maximising long-term shareholder value to (Rio Tinto 2010):

- Have an injury and illness free workplace where everyone goes home safe and healthy each day.

- Profitably and responsibly develop the Simandou Resource in a way that maximises value for shareholders and Guinea.
- Have a Net Positive Impact on biodiversity.
- Build enduring relationships with local communities, which are characterised by mutual respect, active partnerships and long-term commitment.
- Contribute to a sustainable regional economy in partnership with the Government of Guinea.
- Ensure that the Simandou Project is a preferred place of work.

Overall, Rio Tinto will ensure that environmental and social issues are integrated into the planning and implementation stages of the project in order to generate a net positive impact on the host communities and biodiversity and be a catalyst for development outside its operations. The project will also comply with the social and environmental sustainability vision of the IFC Performance Standards (PS) (IFC 2006a).

1.5 COUNTRY BACKGROUND

Guinea and its people are considered some of the poorest in West Africa, despite the country's mineral wealth, which has the potential to make Guinea the richest country in the region. Poverty is evident throughout the society, as witnessed by a lack of education, poor health and sanitation, very limited infrastructure (e.g. wells and schools), poor transportation connections across the country, poor-quality water sources and little access to capital (in particular, there are no sources of microcredit to develop income-generating activities). Guinea has also been affected by instability in neighbouring Liberia, Sierra Leone and Côte d'Ivoire.

Guinea is faced with considerable problems and challenges in regard to the Simandou Project (Rio Tinto 2008):

- **Challenging geography** – The project crosses through the country's four geographic regions, which include mountain ranges in Fouta Djallon and Forest Guinea and low-lying coastal plains in Maritime Guinea.
- **Challenging biodiversity** – There are environmentally sensitive protected areas some with a high degree of species diversity.
- **Weather impact** – A tropical climate including monsoons brings heavy rainfall during the wet season and affects hydrology patterns.
- **Political instability** – The country is prone to social and political unrest and has weak governance structures. Conflicts among rebel groups in neighbouring states have spilled over into Guinea and pose a challenge to the concession.
- **Economic risk** – There is exposure to commodity prices, high inflation and overall macroeconomic instability.

- **Corruption** – Guinea is rated as one of the most corrupt countries in the world.
- **Workforce availability** – Workers are unskilled; there are low literacy levels and public health issues.
- **Infrastructure** – There are poor transportation links across the country and a lack of utilities and services, especially in the isolated area of Forest Guinea.
- **Social issues** – Employment, the cost of living, resettlement, in-migration and refugees are some of the social challenges.

1.6 PROJECT HISTORY

Reconnaissance fieldwork was carried out at Simandou by the French in the 1950s and by the Japanese in the 1970s. Despite recognition of its high potential, the main reason for lack of development of the Simandou iron ore deposit in the past was its remoteness from transportation corridors and the focus on the Nimba deposits close to Liberian infrastructure.

Rio Tinto was first introduced to the project in 1996. After successful reconnaissance visits, the company applied for an exploration licence, which was granted in February 1997. The Simandou mining agreement between the Guinean government and Rio Tinto, which includes terms and conditions for mining within the concession, was signed in February 2003, and the associated mining concession was granted in March 2006. In August 2008, the Guinean government expropriated the northern half of the Simandou concession area. Figure 1.3 shows the current Simandou mining concession along the Simandou Range, which encompasses the Pic de Fon and Pic de Tibé Classified Forests (CFs).

Since being granted its mining concession in March 2006, Simfer S.A. has assessed the commercial viability of the Simandou Project. This work has included an exploration programme, engineering studies, social and environmental impact studies and Rio Tinto strategies (Figure 1.4).

Figure 1.3 Simandou mining concession

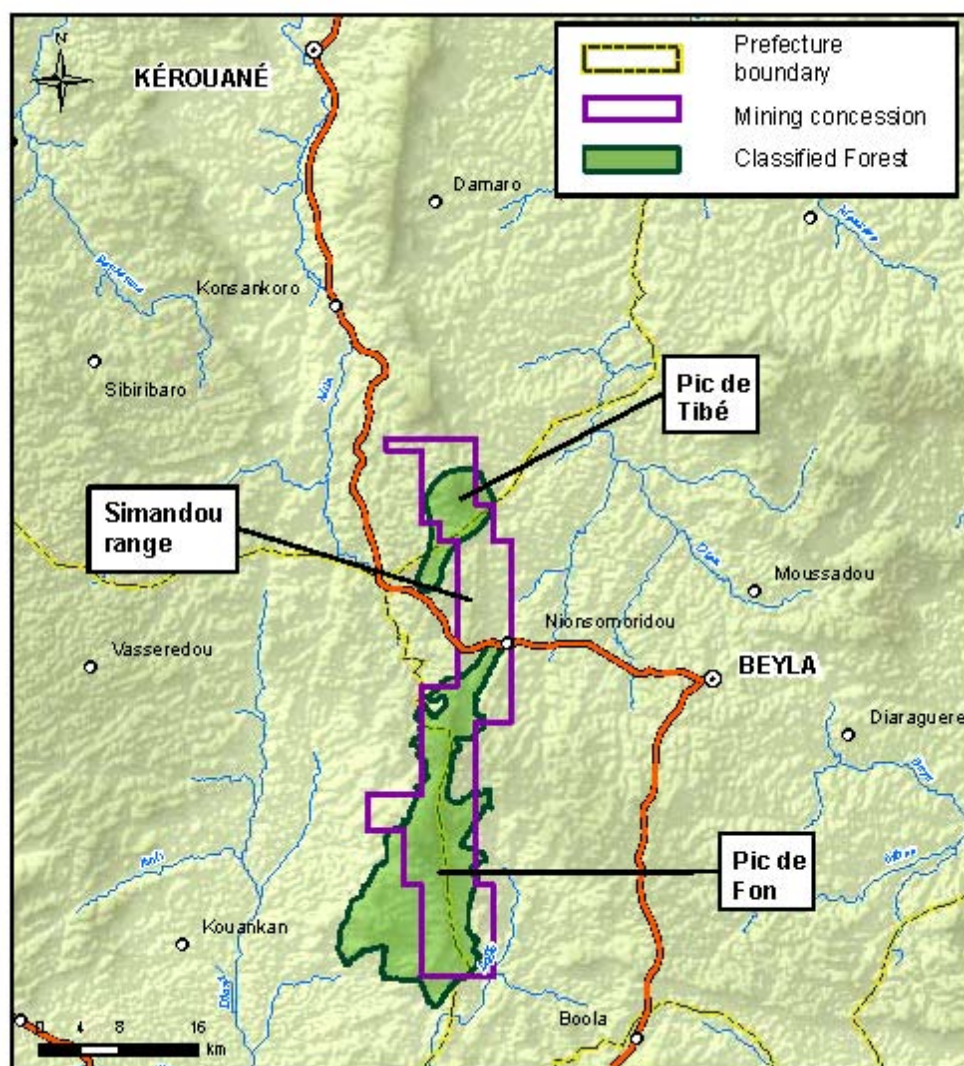
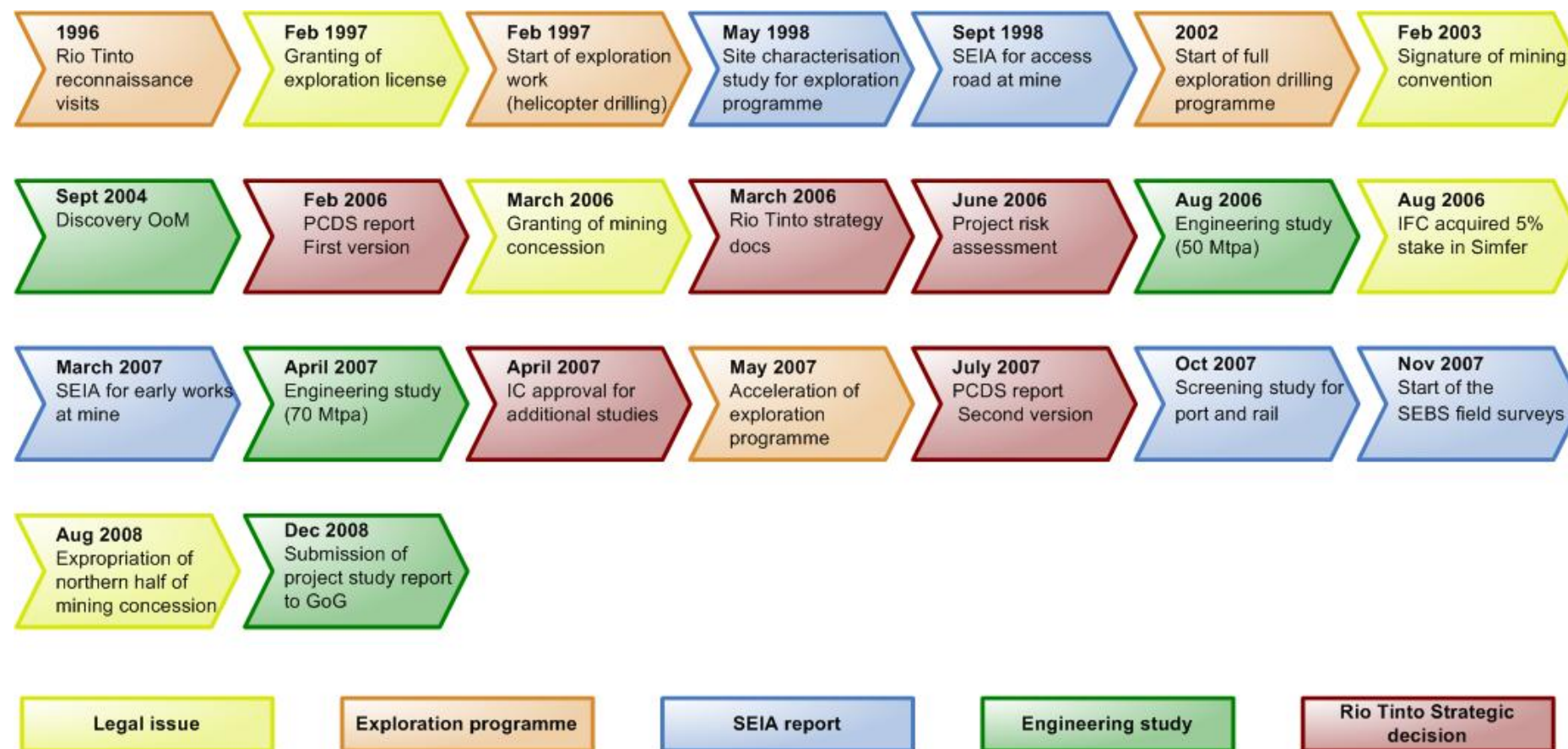


Figure 1.4 Key phases in the Simandou Project



SEBS = Social and Environmental Baseline Study; OoM = Order of Magnitude Study; SEIA = Social and Environmental Impact Assessment; PCDS = Public Consultation and Disclosure Strategy; IFC = International Finance Corporation; IC = Investment Committee; GoG = Government of Guinea

As part of the exploration programme, geological work was carried out in the area under exploration licence from 1997 onwards and is still being done. Five levels of study are undertaken in the Rio Tinto system in order to move projects ahead from the exploration phase to the mining phase: Target Testing (TT); Conceptual Study (CS); Order of Magnitude study (OoM); Pre-Feasibility Study (PFS) and Feasibility Study (FS). As the project progressed through these studies, confidence in the mineral resource and the economic viability of the project increased. Over 200,000 metres of drilling has been completed to determine the location, size and shape of the iron ore resources as well as their metallurgical and mineralogical specifications and therefore their suitability for sale in the export iron ore market. The drilling programme began in 1997 and was speeded up significantly in early 2007 with the approval of additional funds. Photo 1.1 shows drilling platforms and a drilling rig on Pic de Fon.

Photo 1.1 Drilling platforms and drilling rig on Pic de Fon



Source: Rio Tinto 2009



Source: Rio Tinto 2009

Since 2006, Rio Tinto has drawn up corporate strategy documents for the Simandou Project, including the *Public Consultation and Disclosure Strategy* (PCDS), *Community Strategy*, *HIV/AIDS Strategy* and *Biodiversity Strategy*. These strategies, particularly the PCDS, are “living documents” and will be updated at regular intervals. They plan to make future commitments to the community and biodiversity. These strategies are based on a series of guiding principles that explain how Rio Tinto business supports this position.

The exploration programme carried out on the area under exploration licence from 1997 onwards and still continuing required the construction of basic infrastructure. Social and environmental impacts studies were assessed in order to optimise integration of the infrastructure into the environment and mitigate major impacts (Figure 1.4). In May 1998, a preliminary SEIA was conducted for the exploration programme and a second one in September of the same year for the construction of an access road (Hatch & Associates Inc. 1998a and 1998b). In 2007, another SEIA was produced by SNC-Lavalin Environment (2007) for the early works, including the expansion of the existing Canga East camp, a new access road to Ouéléba, and a lateritic gravel-covered airstrip near the town of Beyla (Photo 1.2 and Photo 1.3). The

SEBS, which is the purpose of this report, constitutes the first phase of the comprehensive SEIA at the mine site.

Photo 1.2 Canga East and Ouéléba camps



Source: Wachter 2008



Source: SNC-Lavalin Environment 2008

Photo 1.3 Beyla airstrip and Ouéléba access road



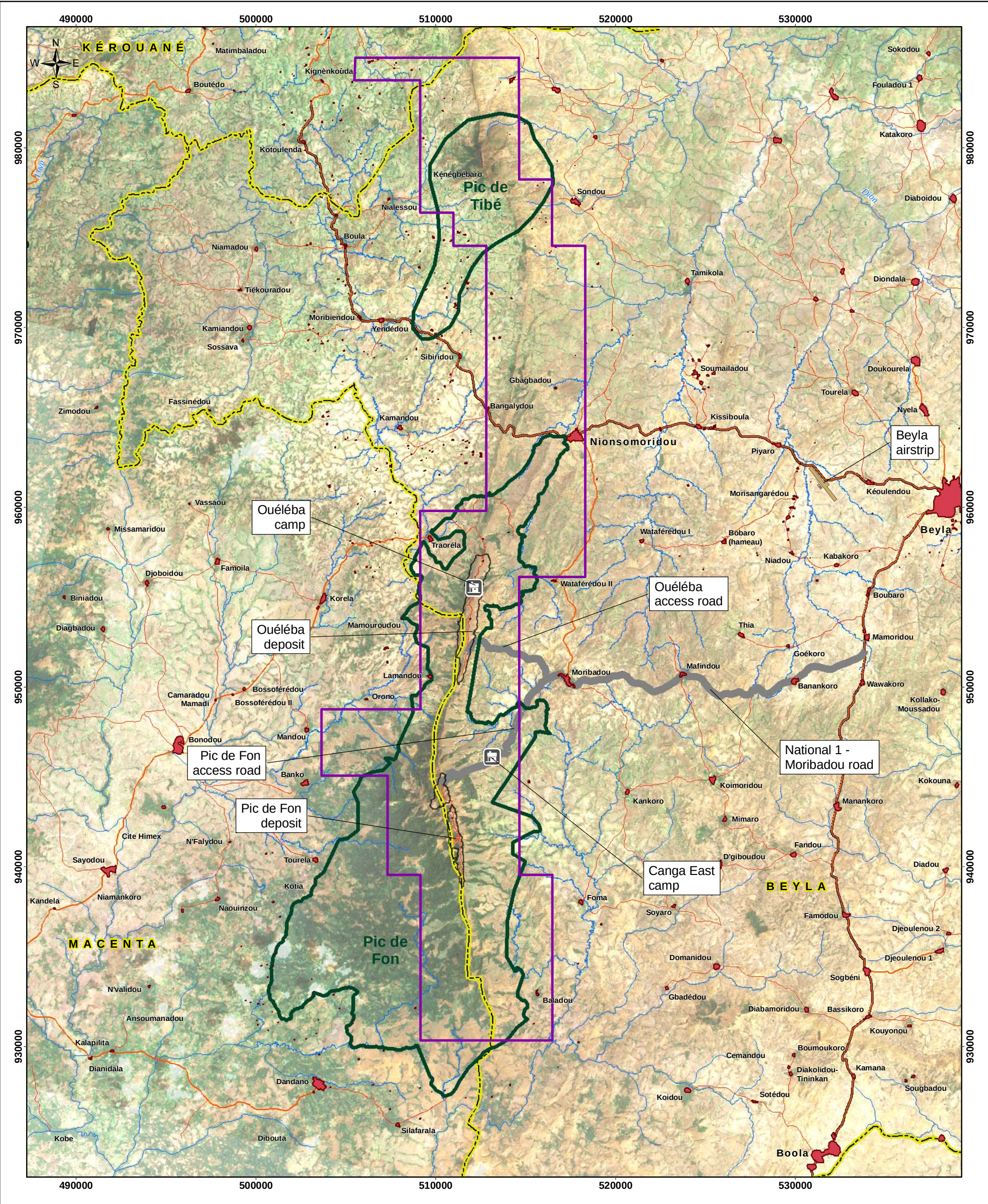
Source: SNC-Lavalin Environment 2008



Source: SNC-Lavalin Environment 2008

To date, the activities involved the setting up of three camps in the concession area: Canga East on the eastern side of the range, which is the major project base camp for exploration along the Pic de Fon ore body; Ouéléba camp on the summit for project activities along the Ouéléba ore body and an office and accommodations base in Kérouané. Map 1.1 shows the locations of Rio Tinto's infrastructure built since 1998 and the Pic de Fon and Ouéléba deposits containing extensive high-grade iron ore mineralisation.

Since 1997, Rio Tinto has conducted an evolving social and environmental baseline programme, starting with site visits, scoping studies, preliminary baseline studies and lastly a comprehensive baseline study (SEBS), which is the purpose of this report. These are summarised in the baseline studies road map submitted with each discipline's volume (Volume B: Social Baseline, Volume C: Physical Baseline, and Volume D: Biodiversity Baseline).



Infrastructure construite par Rio Tinto / Infrastructure built by Rio Tinto			Repères géographiques / Geographical landmarks			Titre / Title		
Camp		Camp	Route principale		Main road	Infrastructures existantes du Projet Simandou / Existing infrastructure of the Simandou Project		
Concession minière		Mining concession	Route secondaire		Secondary road			
Route d'accès		Access road	Piste		Track	Échelle / Scale 0 0.625 1.25 2.5 Km 1:200,000		
Aéroport de Beyla		Beyla Airstrip	Hydrographie		Hydrography			
Dépôt minier		Mining deposit	Limite de préfecture		Prefecture boundary	Directeur de projet (client) Project manager (client) Leon Payne	Projet / Project SIMANDOU	Volume A Carte/Map 1.1
			Forêt classée		Classified Forest	Directeur de projet Project manager Richard Fontaine	No. pr./ P. number 604917	
			Milieu bâti		Built area	01 2010/06/15 Final M. Dupré C. Roy		
						00 2010/02/15 Preliminary M. Dupré C. Roy		
						No. aaaa/mm/jj yyyy/mm/dd Description Dessiné/Drawn Vérifié/Verified		

CHAPTER 2

Project Definition

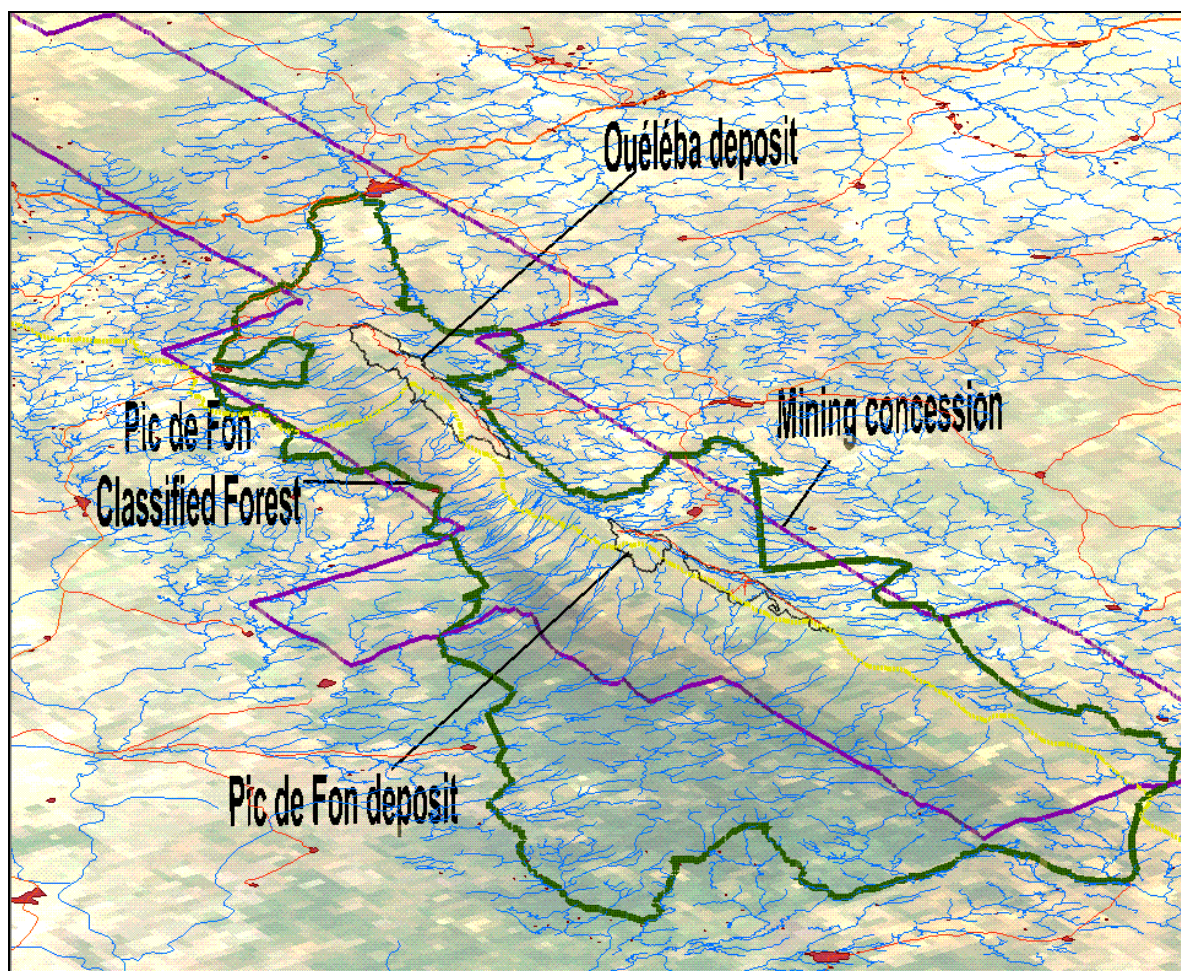
2. PROJECT DEFINITION

2.1 MINERAL RESOURCE

The Simandou Project focuses on the Pic de Fon and Ouéléba deposits located at the southern end of the Simandou Range within the Pic de Fon Classified Forest (PdF CF). In both cases, the ore outcrops are located at the summit of the mountain range consisting mainly of high-altitude grassland interspersed with deep, steep ravines (Figure 2.1).

The exploration programme identified high-quality friable hematite mineralisation with low to moderate impurities. Each deposit is approximately a 7-km strike length and has mineralisation to over 300 metres in depth. The Pic de Fon and Ouéléba ore bodies have reported indicated and inferred resources of more than two billion tonnes of high-grade iron ore (nominal 67% iron). The mine life is approximately 30 years.

Figure 2.1 Locations of Pic de Fon and Ouéléba deposits



2.2 MINE BASE CASE

The mine design is summarised as follows:

- The ore resource consists of more than 2 billion tonnes in the two major deposits in the Simandou mining concession: Pic de Fon and Ouéléba. The ore is predominantly friable hematite and goethitic hematite.
- The mine plans and designs are based on a large scale (70 - 95 Mtpa) saleable ore product operation. Life of mine is expected to be in excess of 30 years.
- The mining operation will involve conventional open-pit mining consisting of drill, blast, load and haul methods with variations.
- A single sinter fines product of 10 mm will be achieved by means of a three-stage dry crushing and screening plant located at the mine site.
- There will be a primary crushing operation at the two mining areas.
- Ore will be conveyed overland from the edge-of-pits to processing facilities downhill at the secondary/tertiary crushing and screening plant.
- Waste, blend ore and low-grade materials will be trucked to dump and stockpile locations. The blend and low-grade will be stored in a manner that allows for future recovery and beneficiation.
- There will be conveyors to move the ore from the mine plant to the live stockyard area at the train load-out systems.
- Power requirements at the mine site are 40-MW. Regenerative conveyors from the edge-of-pits to processing facilities downhill will contribute to this power demand. Additional power sources to meet demand are currently being assessed.

The production capacity, project features and project design will be defined in more detail as engineering progresses.

2.3 MINE DEVELOPMENT

This section outlines the sequence of activities during the construction phase, operational phase and closure phase.

2.3.1 Construction Phase

Pre-production development will commence with the construction of access roads, pre-stripping of the deposits and early works required to meet the production schedule:

- **Topsoil removal:** Topsoil will be removed from the ore body and other infrastructure footprints and conserved for rehabilitation.
- **Access road construction:** Construction of access roads to develop the pits and transport waste.
- **Pre-stripping of the deposits:** Pre-stripping with hydraulic excavators and haulage trucks.

- **Commissioning of the overland conveyor:** Installation of the overland conveyor for commissioning and crusher feed commencement.
- **Early works associated with facilities, services, and infrastructure:** Offices, workshops, stores, stockyards and a load-out station will have to be built before any major mining activities begin. All ancillary services (power supply, potable water supply, sewage treatment, fuel and oil storage, communications, etc.) must also be ready for the start of mining.
- **Early works associated with water and sedimentation control and treatment:** The water management system will comprise sedimentation ponds downstream from mineral waste facilities in order to control water discharge quality.
- **Dump and stockpile base preparation:** The base of dumps and stockpiles will be prepared prior to pre-stripping. Bottom-up construction methods have been recommended to control the placement of material and engineer the material storage.

2.3.2 Operation Phase

A strategic plan will be developed to provide direction for the sequence in which the Pic de Fon and Ouéléba deposits should be mined to optimise the resource and meet target quality parameters. The mining operations sequence is the following:

- **Drilling and blasting:** The mining operation will include conventional drilling and blasting as required.
- **Water management:** During mining operations, the pits will need management in order to redirect or remove storm runoff from the pits and will need dewatering to lower the water table beneath open pits ahead of staged mining. In-pit sumps will be used to manage runoff by flushing out the pit after heavy rainfall events.
- **Primary crushing and conveying:** Primary crushing is necessary for transporting the ore by conveyor to processing facilities downhill and occurs at the pit exits. A conveyor will transport crusher feed from the edge of the active mining areas to the processing plant.
- **Ore processing:** A single sinter fines product will be achieved through a secondary/tertiary crushing and screening plant located at the mine site.
- **Ore conveying, stockpiling and train load-out:** Conveyors will be used to move the ore from the mine plant to the live stockyard area and then on to the train load-out facility.

2.3.3 Closure Phase

Once mining is completed, all pumps, pipe work and water management structures will be removed. A passive hydrogeological/hydrological system will be reinstated post mining.

Disturbed areas will be rehabilitated with the top soil removed from the infrastructure footprints during construction phase and revegetated with indigenous or native plant species.

2.4 EQUIPMENT, INFRASTRUCTURE AND UTILITIES

As is typical in most mining operations, fleets are required for drilling, loading, hauling and providing support (dozing, grading, etc.) for unit operations. The Heavy Mobile Equipment (HME) fleets selected to meet target production consist of the following: hydraulic shovel excavators, front-end wheel loaders, production drills, off-highway haul trucks, water trucks, track dozers, wheel dozers, motor graders, and crane-hydraulics.

Other general plant mobile equipment will be required such as the following: mobile terrain cranes, fuel tankers, low loaders, light vehicles, forklifts, lift trucks, buses, tool handlers, fire tenders and ambulances.

The mine infrastructure at Simandou will consist of the following:

- a workshop complex and material management and warehousing facility
- pit workshops and offices

All buildings at the mine site will be steel frame with corrugated sheeting sides and roofing. Because of the remote nature of the operation, allowance will be made to fully equip all workshops with the machinery required to be self-sufficient in operations. The mine infrastructure will include offices, workshops, stores, medical facilities, guard house security and canteen.

The main utilities required to operate the mine are: processing and potable water supply, sewage treatment, fuel, oil and chemical storage, power supply and communications systems.

CHAPTER 3

Social and Environmental Baseline Study

3. SOCIAL AND ENVIRONMENTAL BASELINE STUDY APPROACH

The Social and Environmental Baseline Study (SEBS) has been prepared in accordance with the Terms of Reference (ToR) of the Simandou Project. This chapter of the SEBS provides an overview of the overall study objectives, the teams involved in the study, and the approach used by SNC-Lavalin Environment (SLE) to conduct the SEBS.

3.1 BASELINE STUDY OBJECTIVES

The main objective of the SEBS is to establish a robust characterisation of the current socio-economic and cultural context and of the physical and biological environment in the Simandou Project areas of influence that will serve as the pre-project reference point against which future changes can be measured. However, it should be noted that this is not really what is called “situation zero” since Rio Tinto has implemented an ongoing exploration programme on the area under exploration licence since 1997. The Project History (Section 1.6) provides an overview of the work and activities undertaken under this programme.

The SEBS report will be used as a reference for producing the Project Social and Environmental Impact Assessment (SEIA) at the Feasibility Stage (FS).

The following are the main objectives of the SEBS:

- Identify the social and environmental legal and institutional frameworks applicable to the Simandou Project, including host country and international laws.
- Provide an overview of the project description in terms of mineable resources, mine base case, development phases, and equipment, infrastructure and utilities.
- Provide a description of the current socio-economic and cultural context and of the physical and biological environments in the project’s areas of influence.
- Develop a comprehensive GIS database with all the information gathered during baseline surveys.
- Identify stakeholders who may have an interest in the project or who may be affected by the project at local (including individuals, households, groups and local communities), national or international levels, and refine the existing stakeholder group.
- Identify the project’s major findings, main concerns of the various parties affected, socio-economic and environmental issues, and risks and opportunities of the Simandou Project.

3.2 BASELINE STUDY TEAM

This SEBS report was prepared for Rio Tinto by SNC-Lavalin Environment.

The Rio Tinto team that oversaw the project and provided the information and comments was led by John Merry, Environment and Community General Manager. Appendix A-1 includes the complete list of Rio Tinto on-site members.

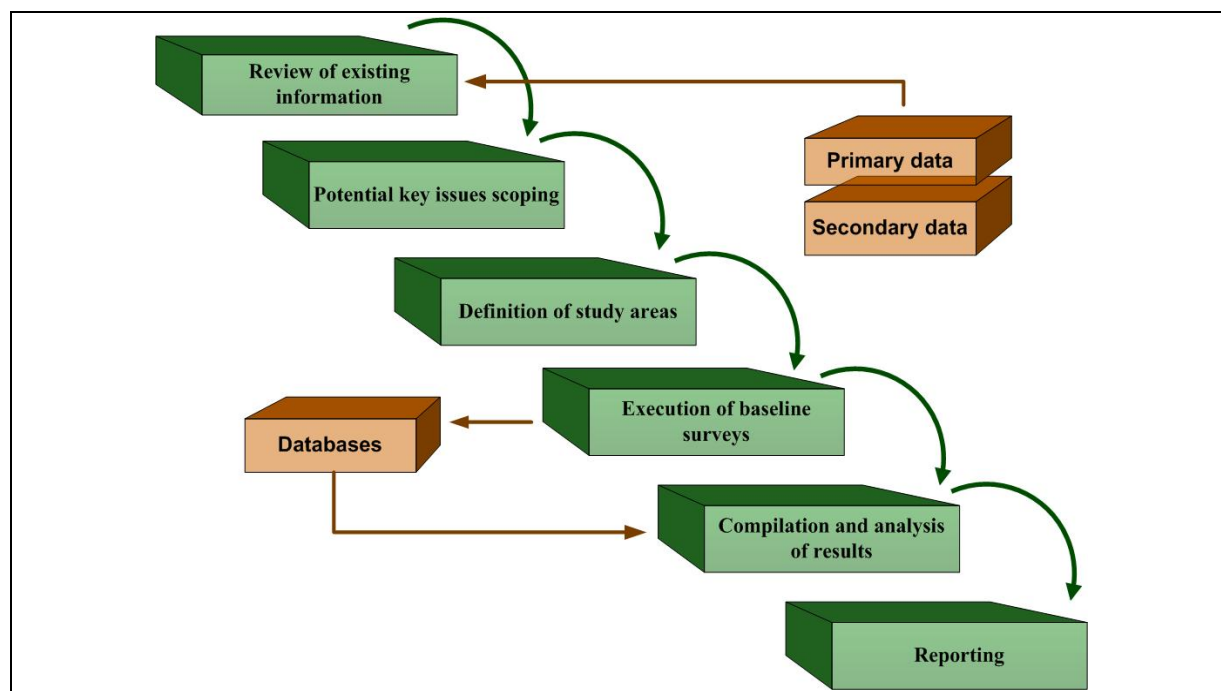
The data collection, fieldwork activities, analyses of results and drafting of the SEBS report were carried out by an experienced team made up of international and national experts under the direction of SLE. Overall, more than 100 individuals were involved in the baseline study. Appendices A-2 and A-3 list all of the SLE team members and Rio Tinto consultants involved in the baseline study for each topic.

Prior to carrying out the baseline surveys, research was done to find national specialists and international experts who could provide appropriate expertise. In line with Rio Tinto's policy, one of the key goals of the surveys was to build capacity in terms of Guinean specialists. Therefore, most surveys included Guinean specialists in the field along with international experts. The Guinean specialists are from organisations such as Conakry University, N'Zérékoré Forestry Centre (CFZ), Guinée Écologie, Programme de conservation de la biodiversité des Monts Nimba, Centre de Gestion de l'Environnement des Monts Nimba et Simandou (CEGENS) and Centre National des Sciences Halieutiques de Boussoura (CNSHB), or they are independent consultants. International experts come from various consultancy firms and institutions in Canada, United Kingdom, Germany, Netherlands, USA, Côte d'Ivoire, Gambia, Cameroon and Benin.

3.3 BASELINE STUDY APPROACH

The following sections provide a summary of the steps taken by SLE to produce the SEBS of the Simandou Project (Figure 3.1). They outline the overall general approach taken to conduct the study, and a detailed and specific methodology is included in each of the discipline baseline volumes (Volume B: Social Baseline; Volume C: Physical Baseline; and Volume D: Biodiversity Baseline).

Figure 3.1 Steps leading to the baseline study report



3.3.1 Review of Existing Information

All existing social and environmental baseline information useful for the characterisation of the Simandou Project areas was collected, compiled and analysed. It includes both primary data from previous studies conducted by Rio Tinto and its consultants and secondary data regarding the study areas.

All existing data has been reviewed for scoping of potential key issues as defined by stakeholders and specialists, and for identification of any additional information needed to complete the characterisation and consequently, improve planning of the baseline surveys. Most of the previous studies (primary data) and secondary data were used in the SEBS as qualitative or complementary information.

3.3.1.1 Primary Data

Since the start of the first exploration campaigns in 1997, Rio Tinto has conducted several field investigations as well as various social and environmental studies for the purposes of the Simandou Project. These previous studies were carried out to obtain information for a better understanding of the social organisation and socio-economic conditions of local communities and the receiving environment. They include the following:

- Studies conducted specifically within the study areas but not associated with the Simandou Project (e.g., Winrock International and N'Zérékoré Forestry Centre studies);
- Studies providing basic information on the Simandou Project that gives a preliminary picture. It includes site visit reports and screening or scoping studies that provide an initial picture (such as the Rapid Biological Assessment (RAP));
- Studies whose findings are no longer representative of the current state of the environment or reference point (not recent studies, e.g., dating back to 2002 and 2003); and
- Studies that cannot be included with and/or compared with the recently gathered data for the baseline study because of different inventory-taking/investigative methods used.

Each discipline volume (Volume B: Social; Volume C: Physical; and Volume D: Biodiversity) includes a baseline studies road map that summarises all previous work and studies conducted for the project before starting the baseline surveys.

3.3.1.2 Secondary Data

The secondary data includes data that have already been collected by individuals or agencies for purposes other than those of the Simandou Project. The data have been gathered in literature reviews and meetings with public and private-sector stakeholders at the national, regional and local levels.

A significant amount of secondary data was obtained either from national-level sources (Household Income and Expenditure Survey, Population Census, Health and Education, Government Agriculture Offices, etc.) or in specific surveys conducted by various agencies (UN, WB/IDA, AFD, EU, IRD (ex-ORSTOM), USAID, ABC Development, World Education, CI, FFI, Guinée Écologie, University of Conakry, etc.).

3.3.2 Potential Key Issues Scoping

Many studies have been conducted in the mining concession zone since the exploration programme began in 1997. From the earliest stages of exploration, the potential social and environmental sensitivity of the Simandou region to the operation of an iron ore mine was recognised. Any large-scale economic activity in this region has the potential to create a major impact on the lifestyles and livelihoods of communities. In addition, one of the major concerns associated with development of the project is the variety and relatively unique character of the natural habitats and biodiversity found in the area that are associated with significant altitude changes, orographic effects and associated climatic and hydrologic variations.

Scoping of important issues as defined by stakeholders and experts familiar with the potential effects of the Simandou Project needs to be clarified in order to justify and give proper direction to the scope of the social and environmental baseline surveys. When starting up the SEBS, a list of the key social and environmental issues that could result from the Simandou Project was drawn up (Table 3.1). This list was based on the following: input from public consultations held since 1997 for project purposes, findings from previous SEIA and initial baseline studies (Hatch & Associates Inc. 1998a, Synergy 2003, RTI International 2006), international best practice, and the study team's knowledge.

Table 3.1 Potential key issues scoping

Discipline Category	Component	Potential issue
Social issues	Resettlement and land acquisition	- Relocation of housing and businesses - Loss of land and crops - Loss of income and businesses
	In-migration	- Increased demand for housing and agricultural land - Increased pressures on existing infrastructure and natural resources - Increased vulnerability to HIV/AIDS and other infectious diseases
	Social disruption	- Changes in traditional activities and customary practices of the local population, including community health and safety - Social and cultural tensions/conflicts
Environmental issues	Climate	Lowering of the mountain crest may pose a risk to the local microclimate by potentially altering existing rainfall patterns and affecting hydrology

Discipline Category	Component	Potential issue
	Hydrology	Possible climatic changes affecting hydrology (including amount of precipitation, base flow and groundwater recharge)
	Hydrogeology	Extraction of the ore would likely affect the local area water table serving as a natural reservoir with perceived potentially significant consequences for the local environment
	Erosion	Difficulty in managing erosion and sediment in surrounding streams due to high rainfall coupled with steep topography
	Water quality	Changes to quality of downstream water used by local communities because of erosion
	Biodiversity/species	Impacts on the biodiversity of the PdF CF; potential risk to rare and endangered species
	Forest/habitat	Deforestation, either for mining project purposes or to meet the need for agricultural land, will have impacts on natural resources used by local communities. The perception is that areas of existing forest may be reduced and the savanna increased

3.3.3 Definition of Study Areas

Defining the geographic extent of study areas is a key component of the baseline study given that it will be used for the impact assessment to be conducted in a subsequent phase. Two project areas of influence, as defined in the IFC Policy and Performance Standards, were identified for each component: the Local Study Area (LSA) and the Regional Study Area (RSA).

Typically, the LSA is based on the spatial extent of the project's footprint and related facilities as well as on the associated effects on the receiving environment. The LSA should be large enough to efficiently describe the receiving environment and analyse and mitigate the potential effects of the project.

Some human activities and natural factors require a broader or regional geographic area in order to understand the context that justifies having RSA. This spatial scope also makes it possible to identify project-related effects along with other human-induced and natural influences from existing projects and/or anticipated future projects in the surrounding areas (cumulative impacts).

Table 3.2 summarises the rationale for the spatial scope definition. The rationale for delimiting the various study areas for a specific discipline and their associated maps are provided in each of the baseline volumes (Volume B: Social Baseline; Volume C: Physical Baseline; and Volume D: Biodiversity Baseline).

Table 3.2 Rationale for regional and local study areas

Discipline	Regional study area (RSA)	Local study area (LSA)
Social baseline	- Regional administrative context: Beyla and Macenta prefectures - Demographic, education and health analysis - Analysis of agricultural production and marketing systems - Land use and landscape analysis	- Social, cultural and economic conditions of priority villages (levels 4 and 5) and villages surveyed - Context for understanding the socio-economic local conditions - Cultural heritage sites - Surface water use - Land ownership - Development of social projects
Physical baseline	- Regional rainfall pattern of southeastern Guinea - Broad regional physiographic units in southeastern Guinea - Main regional geological formations of the Simandou ridge - Hydrological characteristics of the regional watersheds of southeastern Guinea	- Local climate patterns (rainfall, fog, wind, etc.) at the project site and their relationship to altitude - Villages closest to the Simandou ridge: noise background and air quality sensitive receptors potentially affected by project activities - Geomorphological units specific to the project - Geological formations associated with the Simandou iron ore deposits, terrain hazards, soil quality and ARD - Soil characteristics in the vicinity of the project - Hydrological regime of the streams and local catchments of the PdF CF - Water quality and utilisation in the vicinity of the PdF CF - Local groundwater recharges and flow process of the PdF CF
Biodiversity baseline	- Regional biodiversity context: protected area network of the Guinea Forest region. - Provide distribution of habitats and species - Allow comparison of the PdF CF biodiversity with other regional protected areas	- Comprehensive survey of the PdF CF and surrounding area where sensitive habitats and conservation priority species are found - Area where the direct biological impacts of the mine are anticipated

3.3.4 Baseline Surveys

The comprehensive baseline field surveys were conducted inside the project study areas mostly between November 2007 and December 2008. The following methods

were used in the baseline surveys to collect site-specific data: interviews, village surveys and household surveys, sample-gathering programmes (ambient noise, soil quality), monitoring programmes (climate, air quality, flow measurements, water quality, etc.), and comprehensive inventories for plant and wildlife species. Detailed methodologies are included in their respective discipline volumes.

Some monitoring and sampling programmes implemented by Rio Tinto consultants started before the baseline surveys and were considered part of the SEBS. This was the case for the climate and hydrology monitoring studies conducted by Water Management Consultants from 2006 onwards, and for the flora sample gathering done by the Royal Botanical Gardens, Kew from 2005 onwards.

For some components, the studies or work are continuing in order to collect additional baseline data, such as the following:

- Ongoing measurements or monitoring programmes (e.g., hydrology, hydrogeology, climate). Subsequent measurements are taken at the same sampling sites at different times or under different circumstances in order to see if there are changes in comparison to the baseline situation.
- Ongoing studies to enhance the baseline study (e.g., additional targeted surveys for conservation priority species).

3.3.5 Compilation and Analysis of Results

In order to compile and analyse the large quantity of data collected in baseline surveys, spatially geo-referenced information was stored in separate databases for each discipline (social, physical¹ and biodiversity). The datasets were validated and standardised for processing in terms of analysis and results mapping. Figure 3.2 shows an example of the dataset structure (biodiversity discipline).

3.3.6 Presentation of Results

3.3.6.1 Report Structure

The SEBS comprises five volumes as shown on the road map at the beginning of each volume that serves as a table of contents. Each volume is intended to be a stand-alone report (including figures, maps, references and appendices):

- **Volume A:** Project Framework
- **Volume B:** Social Baseline
- **Volume C:** Physical Baseline
- **Volume D:** Biodiversity Baseline
- **Volume E:** Executive Summary and Conclusion

¹ Physical database excludes the climate, hydrological and hydrogeological data collected by Water Management Consultants (WMC). These data are held in a huge access database named HYDATA managed by the consultant.

3.3.6.2 Report Content

All three Social, Physical and Biodiversity Baseline volumes comprise the following sections:

- Introduction and Objectives
- Study Areas
- Methods
- Results

Key results, including data analyses, are included in the volumes, and detailed results that could give readers a better understanding of some topics are included in the appendices.

Appendices B and C of this volume present the tables of conformance to the Terms of Reference for the SEBS and to IFC Performance Standards respectively.

As a general editing rule, the official forms of geographical names mentioned in the report are those adopted in the country's official language (French). Therefore, place names have accents and diacritical marks as they appear in the list of official village names agreed upon with Rio Tinto.

A glossary of terms, a list of acronyms and abbreviations, and references are provided at the end of each volume.

3.3.6.3 Visual Aids

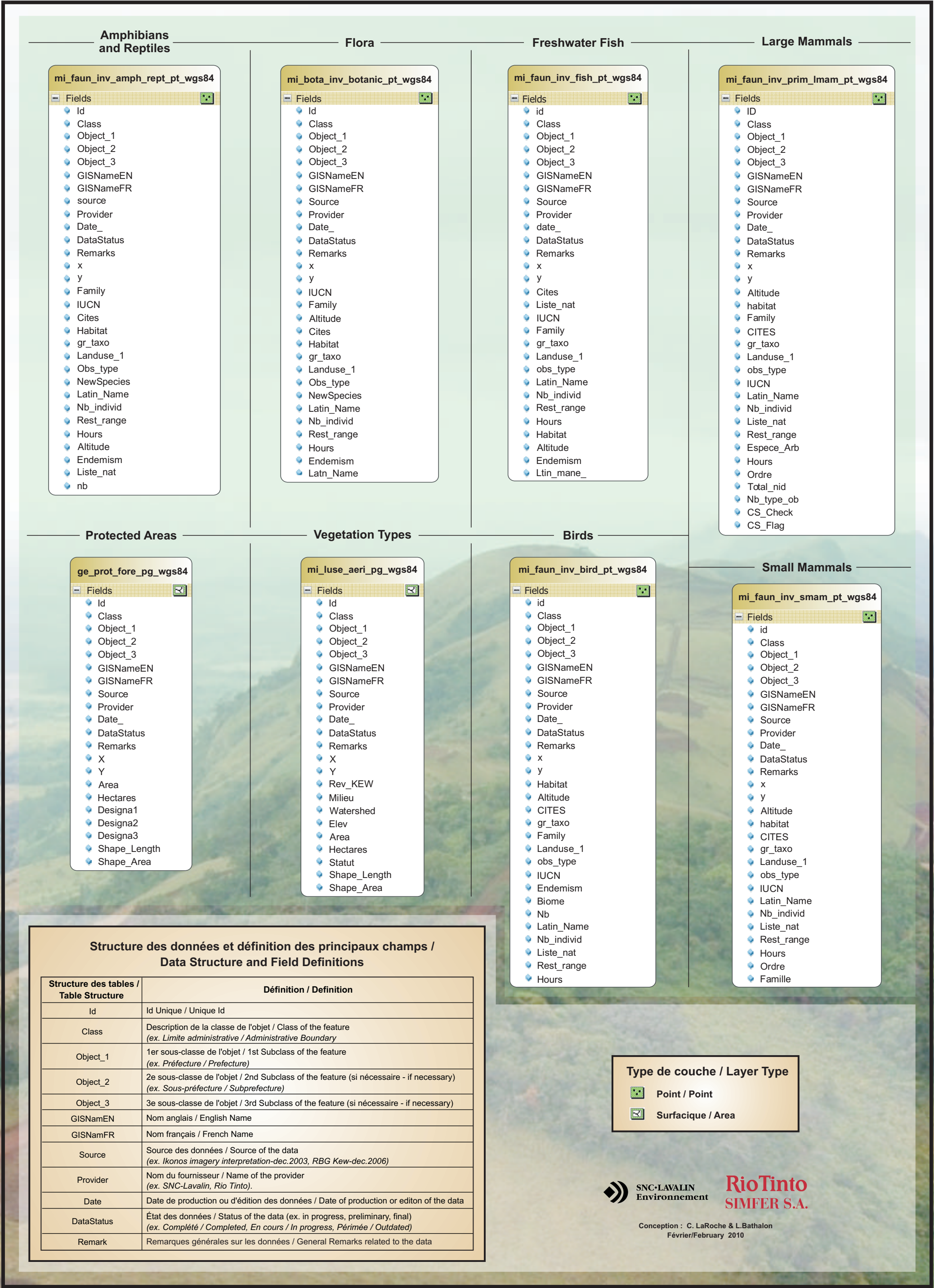
In order to illustrate the descriptions of receiving environment components, maps, figures and photographs are included throughout the report. The following distinction is made between a map and a figure:

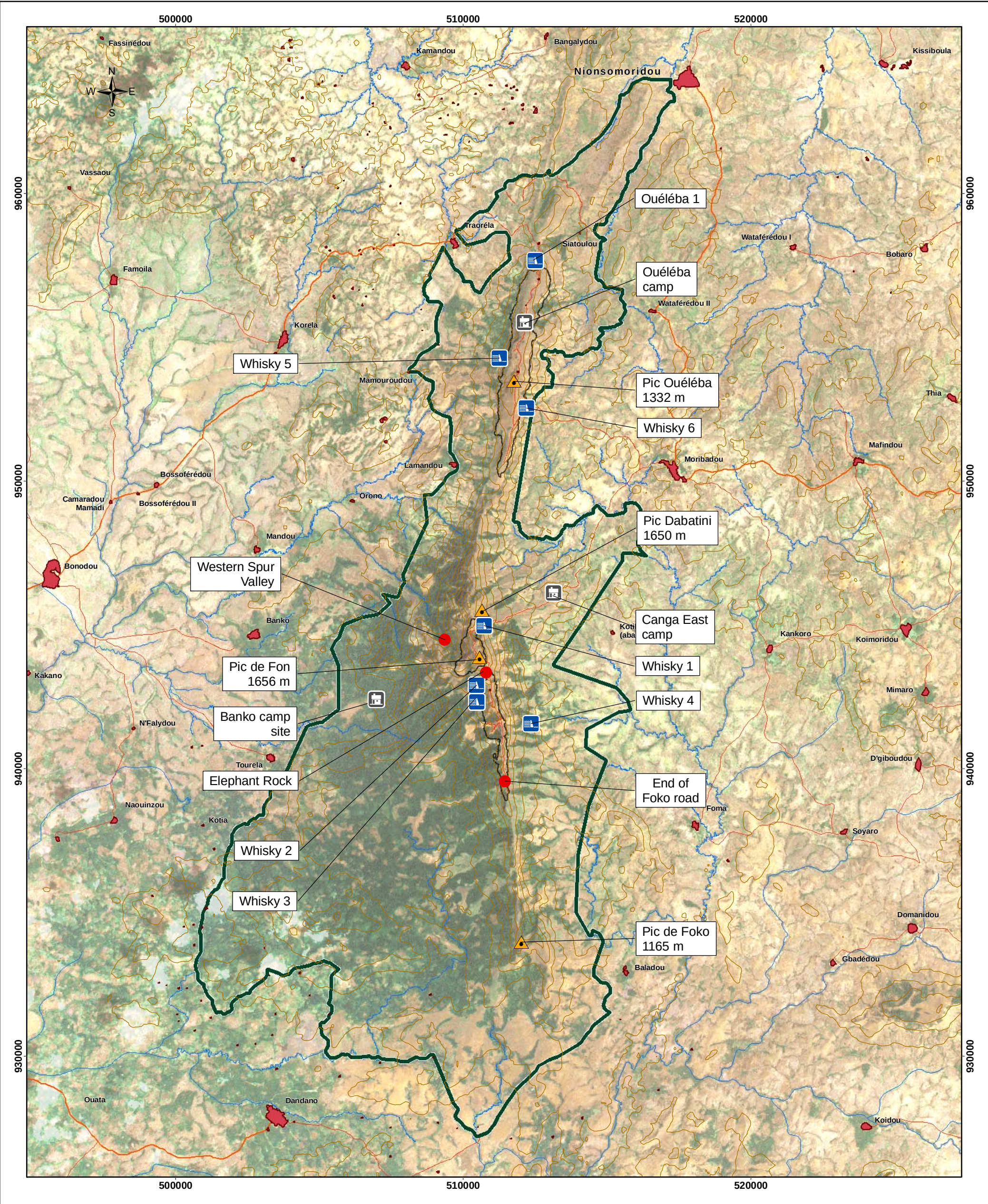
- **Map:** A representation of geographic elements in space that is produced as carefully as possible on a smaller scale using a line map. The map includes a system of co-ordinates (latitude, longitude and altitude), a numerical scale and a legend.
- **Figure:** A document (drawing, image) that is more simplified than a map and explains or facilitates understanding of a geographic problem. It may be separate from the line map or even be rendered in simple geometric shapes (points, lines, surface or volume). Figures do not include a system of co-ordinates or useful numerical scale, but they may have a legend.

The ArcGIS software application was used to process and map the geo-referenced data collected in the baseline surveys.

As part of the project development work, Rio Tinto built basic infrastructure and named geographical landmarks specific to the Simandou Project. To help readers understand the baseline description that often refers to these infrastructure and these landmarks, Map 3.1 shows their locations.

Figure 3.2 Example of database structure for biodiversity





Repères du Projet Simandou / Simandou Project landmarks

- Pic

Camp

Source

Site d'intérêt

Aire minière
-
- Pic

Camp

Spring

Interest site

Mining area

Repères géographiques / Geographical landmarks

- Route secondaire

Piste

Hydrographie

Forêt classée du Pic de Fon

Milieu bâti
-
- Secondary road

Track

Hydrography

Pic de Fon Classified Forest

Built area

Titre / Title

Repères et infrastructures du Project Simandou / Simandou Project landmarks and infrastructure

Échelle / Scale 0 0.625 1.25 2.5 Km 1:125,000		Projet / Project SIMANDOU	Volume A Carte/Map 3.1	
Directeur de projet (client) Project manager (client) Leon Payne		Directeur de projet Project manager Richard Fontaine		No. pr./ P. number 604917
01	2010/06/15	Final	M. Dupré	C. Roy
00	2010/02/15	Preliminary	M. Dupré	C. Roy
No.	aaaa/mm/jj yyyy/mm/dd	Description	Dessiné/Drawn	Vérifié/Verified

Social and Environmental Legal Framework

4. SOCIAL AND ENVIRONMENTAL LEGAL FRAMEWORK

This chapter defines the social and environmental legal framework governing the Simandou Project. Guinean laws, Rio Tinto and IFC policies and guidelines will apply to the construction, operation and closure of the project.

4.1 MINERAL RIGHTS AND GUINEAN LEGAL REGIME

4.1.1 Mining Concession of SIMFER S.A.

A mining concession for the exploration and mining of iron ore at Simandou, was granted by decree (D2006/008/PRG/SGG) to the company SIMFER S.A., subsidiary of the Rio Tinto group, on March 30, 2006 pursuant to a Mining Convention (signed on February 2003), that has the force of law in Guinea. The decree granting the concession identifies the location, the area and the perimeter of the territory in the concession and defines the duration of its validity. The Convention defines the general and specific conditions related to the exploration and mining of the Simandou iron ore deposits. These conditions are grouped under seven separate sections, which are summarised in Table 4.1.

The Convention also defines the applicable laws and decrees and the obligations pertaining to the respect of health and safety regulations, environmental conservation and the rehabilitation of areas disturbed by the mining works, in accordance with the Mining and the Environment Codes.

Table 4.1 Summary of the Mining Convention

SECTION I – General provisions	
Article 1	<u>Purpose of the Convention:</u> 1) Define the legal, administrative, financial, fiscal, customs and social conditions, within the framework of which SIMFER S.A. will implement the exploration and prospecting activities for the iron ore; 2) Define the general and economic conditions under which the project will be executed.
Article 2	<u>Description of the project:</u> 1) Undertake iron ore exploration and prospecting works and, if the results of the said works are positive, prepare a report of the financial feasibility and the development of any deposits discovered; 2) Invest in mining infrastructure, transport and shipping infrastructure and other infrastructures needed for the project to develop the deposit.
Article 3	<u>Co-operation of the Administrative Authorities:</u> In accordance with the terms of this Convention and applicable legislation, the State will facilitate all exploration and prospecting activities and studies to be carried out by SIMFER S.A. for the development and exploitation activities of the iron ore.
SECTION II – Exploration activities and feasibility study	
Article 4	<u>Granting of a mining concession:</u> The State shall grant a Concession, by an assignment decree that includes the particular conditions of the Concession, for a term of 25 years that can be renewed by tacit agreement for a further period of 25 years. Afterwards, the Concession can be renewed by periods of ten (10) years in accordance with the provisions of the Mining Code.
Article 5	<u>Detailed exploration and prospecting works programme:</u> Conditions for pursuing the exploration and prospecting works programme undertaken by SIMFER S.A. within the framework of the prospecting permit.

Article 6	<u>Expenses for exploration activity</u> : Financial conditions for the exploration works (art. 5).
Article 7	<u>Discovery of other mineral resources</u> : Conditions relative to the discovery of other mineral resources (right of pre-emption, third party involvement, etc.).
Article 8	<u>Feasibility report</u> : Conditions for the preparation of a feasibility report including the proposed development, the location of the deposits, the requirements regarding staff and supplies, the anticipated impacts on the environment, a works schedule, a market analysis, the financial studies showing the expected profit margins, and the probable sources, types and terms of financing.
SECTION III – Exploitation	
Article 9	<u>Mining methods</u> : The provisions of the Convention will prevail over any other provisions of Guinean regulation. However, the Guinean regulation and in particular the Code of Economic Activities and the Mining Code will apply in so far as they are not contrary to the provisions of this Convention or if this Convention expressly provides for it.
Article 10	<u>Mining rights</u> : Subject to SIMFER S.A.'s compliance with its obligations, the Concession shall grant it an exclusive and automatic right to mine any deposit of iron ore within the exploitation perimeter.
Article 11	<u>Processing and transformation of the iron ore</u> : Obligation for SIMFER S.A. to study the technical and economic feasibility of a pelletizing unit in Guinea if the exploration activities produce results indicating the existence of sandy ore and if adequate power sources are available in Guinea.
Article 12	<u>Agreement with third parties</u> : Conditions in the event of the State receiving a request from a third party regarding exploration or mining rights for a mineral substance other than iron ore within the SIMFER S.A. exploration perimeter.
Article 13	<u>State right of access</u> : Right of visit and inspection as contemplated by the Mining Code.
Article 14	<u>Production targets, capacity</u> : Minimal target of 20 Mtpa, subject to the conclusions of the feasibility report.
Article 15	<u>Access to production</u> : The State may have access to production for the supply of an iron and steel industry in Guinea, on the basis of a sales contract.
Article 16	<u>Marketing</u> : SIMFER S.A. will have the right to freely export from Guinea all or part of its production upon payment of charges and taxes listed in the Convention which may be due and payable in Guinea.
Article 17	<u>Infrastructure</u> : Clarification of the responsibilities of each of the parties for the development schemes for highways, railways (Trans-Guinean) and port facilities and related installations on which mining and exploitation of the iron ore deposits of the Concession are strictly contingent. Provisions concerning infrastructures to be built on the public domain, on national private domain and on private land.
Article 18	<u>Freight and ocean transport</u> : Obligation for SIMFER S.A. to ship the exported ore by vessels flying the Guinean flag or similar, specified by the State, provided that these vessels comply with certain conditions.
Article 19	<u>State participation</u> : Recognition of the State's right to stock options allowing it to acquire up to 20% of SIMFER S.A. stock, and the applicable conditions.
Article 20	<u>Procurement and supplies</u> : Utilise, to the extent possible, services and raw materials sourced in Guinea, as well as products manufactured in Guinea in so far as they are available at competitive prices.

Article 21 Recruitment of employees: Conditions for the recruitment of personnel: 1) employment priority given to Guinean nationals and/or residents to fill unskilled labour positions, 2) preference given to Guinean nationals for management and upper management job appointments; 3) implementation of a training and promotion programme allowing Guinean personnel to access management and upper management positions; 4) comply with existing health legislation and regulations; 5) implement medical and educational facilities, at the start of production, that meet the workers and their families' normal requirements; 6) description of the State's obligations towards SIMFER S.A. regarding employment.

Article 22 Recruitment of expatriate employees: SIMFER S.A. is completely free to recruit any expatriate employee necessary for the efficient operation of the mining activities and for their success. Conditions are listed for the expatriates (work permit, resident visa, etc.).

SECTION IV – Tax and customs regimes

Articles 23 to 32 General provisions pertaining to the tax and customs regimes (Guinean legislation) applicable during research, studies and construction activities, exploitation phase and for ore processing operations. Articles for the calculation of taxes and charges, establishment of sundry provisions such as accounting principles, financial statements, interim reports, sell-out, merger, de-merger, partial transfer of assets.

SECTION V – Sundry guarantees, environment and transfers

Articles 33 to 36 Provisions regarding general guarantees, account operations and currency transfer guarantees; administrative, mining and land guarantees (free occupation and use of land required for the deposit and the right of way for transport and freightage infrastructure) and guarantees for protection of SIMFER S.A. property, rights, title and interests.

Article 37 Guarantees for the protection of the environment and cultural heritage: Obligation for SIMFER S.A. to conduct its different activities with due consideration for the environment, health, safety and well being of its employees and of the community; by conducting environmental impact assessments and by committing to the preservation of the environment and the public infrastructure, to repair any damage caused to the environment and to the infrastructure, to comply in all respects with current legislation regarding hazardous waste, natural resources and environmental protection, to rehabilitate the excavated areas. Obligation to conduct archaeological surveys and share in the reasonable costs of salvage, in the event of the discovery of an archaeological site or items of national cultural heritage.

SECTION VI – Sundry provisions

Articles 38 to 42 This section covers the provisions applicable to insurance, indemnity, force majeure, early termination (identification of the situations justifying a termination) and the settlement of disputes.

SECTION VII – Final provisions

Articles 43 to 54 This final section defines, among others, the clauses relative to: amendments for any provision not contemplated in the Convention, successors and beneficiaries, partial waiver, confidentiality, language of the agreement and measuring system, term, continuation, notification, and entry into force of the Convention.

4.1.2 Mining Code

The Mining Code (Law L/95/036/CTRN; June 30, 1995) sets the framework for all mining activities in Guinea, including investigating, operating, trade and transformation. It presents the principle of the State ownership of all Guinean mineral resources. If not directly undertaken by the State itself, development of mines and quarries can only be granted to Guinean entities, whether public or private. Different instruments provide the appropriate framework for mining operations according to their scope, with major extraction operations falling under the Mining Concession regime (Articles 41 to 46).

The Mining Code establishes the principle of State ownership of underground mineral or fossil deposits in the exclusive economic zone or surface deposits. It also establishes its ownership of groundwater resources and geothermal deposits. However, mining title holders acquire ownership of extracted substances.

The Mining Code provides six obligations pertaining to mining operations, summarised as follows:

- Mining operations must be carried out in such a manner as to ensure a rational development of national mineral resources using standard techniques (good practice) recognised in the mining industry.
- Mining operations must be carried out in such a manner as to ensure environmental protection by taking measures for prevention of environmental pollution, treatment of wastes, emissions and effluents, and preservation of forest and water resources.
- Mining title holders must, under prevailing statutory and regulatory provisions, indemnify the State or any other person for damages and injuries caused by them.
- Preference must be given to Guinean enterprises for all construction, procurement or service contracts, provided that such enterprises offer equivalent prices, quantities, qualities and delivery periods.
- Mining title holders must give preference to Guinean workers, set up a training programme and make sure that as much of its personnel as possible is Guinean.
- Title holders must carry out mining operations in such a way as to encourage the transfer of technology and skills to Guinean enterprises and human resources as much as possible.

Mining title holders may, without any particular formality, transport or have their operating products transported to storage, treatment and loading sites. They may also provide conditioning, treatment, refining and processing facilities for extracted substances and build the industrial infrastructure needed for mining operations in accordance with existing regulations.

4.2 GUINEAN SOCIAL LEGAL REGIME

The social legal framework is based primarily on the 1992 Constitution (or Fundamental Law) and on some key legal texts, such as the Labour Code and the

Social Security Code. Also, the statutory right to land ownership and use, which is a key issue for the project, is based on the 1992 Domain and Land Tenure Code and, for local governments, the Decentralisation Law. This framework for land ownership and use focuses primarily on securing land tenure and use rights in urban areas of the country; the Code does not address rural land tenure. As a consequence, in 2001, the Government adopted a Rural Land Policy.

4.2.1 Constitution or Fundamental Law

The Fundamental Law proclaims the equality and solidarity of all nationals and restored the right of ownership of private property in Guinea, both customary and legal (after a break during the 1958–1984 period, when land was nationalised), and the fact “that no one can be deprived of property except where public interest has been established, and this only subject to fair and prior compensation.” However, there are no expropriation laws outlining the rights and compensation procedures for land expropriated for public interest. It is the Domain and Land Tenure Code that provides provisions on expropriation for public purposes.

4.2.2 Labour Code

The Republic of Guinea has been a member of the International Labour Organization since 1959 and 79 conventions are currently proposed for ratification. The Guinean Labour Code (Order No. 003/PRG/SGG/88), which is regarded as one of the most modern in West Africa, provides an exhaustive legal framework for employment contracts, working conditions, the representation of social partners and the protection of workers’ health. The main applicable articles are presented in Appendix D.

4.2.3 Social Security Code

The Social Security Code (Act L/94/006/CTRN) applies to all workers under the Labour Code, including government employees. It deals primarily with the national social security fund which manages: old age pensions, invalidity and survivors’ pension, the prevention of occupational hazards, family allowances and health insurance and social initiatives.

This Code states the powers of the fund to collect contributions and distribute benefits according to the services required. The conditions under which workers are eligible are detailed in the Code. With regard to the correction and prevention of occupational hazards, the Code spells out the responsibilities of the employer and those of the Fund in the event of an accident or illness in the workplace.

4.2.4 Domain and Land Tenure Code

The adoption of the Domain and Land Tenure Code (Order No. 0/92/019; March 30, 1992) further entrenched rights to private ownership of land, reflecting the commitment of the Government to liberalization of the Guinean economy. The key aspects of the Code include:

- The State as well as all corporate and legal entities may hold title to land as property (Article 1).
- Property is defined as the free use and disposal of a resource, subject only to specific limitations related to public interest (Article 2).
- To be considered property, land must be registered in a land tenure plan that is maintained by the relevant Urban Commune, as the case may be (Article 3).
- The land must also be registered with the national land tenure registry (Article 3). This confers legal rights to the land to the title holder (Article 10).

The limitations on private property include the right of the State to expropriate land where a public interest has been established (Article 55), to regulate land uses for the purposes of urban or rural development (Articles 84-95) and, where the public interest warrants, to establish servitudes (Article 94). Expropriation requires a rigorous public process (Article 57) and a “just and prerequisite indemnity” (Article 55).

As set out in the Code, the State has rights to land deemed to be in the public domain as well as private property. The public domain is land that is allocated to provide public services and/or is used by the public. The property rights held by the State to land in the public domain are inalienable and not subject to statutory limitation (Article 101). As part of the private property rights of the State, the Code explicitly includes all “vacant or unclaimed land” (Article 119).

Finally, the Code does not recognise customary property rights. However, it does include in the definition of property holders those people who continuously occupy a land holding for 30 years or more (Article 39). The Code does enable those people to register formal property rights to such land, provided they have maintained a level of investment in the land and, as validated in a public process, there are no contradictory claims to the land.

4.2.5 Decentralisation Law

Under the Decentralisation Law, the property of the Urban Communities includes public and private domains. The public domain includes lakes, streams and underground water resources, local public forests, tourist sites, and “land reserves.” The private domain includes patrimonial resources and is presumed to include land holdings.

4.2.6 Pastoral Code

Natural pastures under the Pastoral Code (Law L/95/051/CTRN; August 29, 1995) are defined as the portions of forest domains that provide pasture resources, as well as fallow or post-season crop lands. These areas are open to pasturing livestock, subject to environmental protection considerations and, in the case of fallow agricultural lands, the permission of the property owner.

4.2.7 Rural Land Policy

The Rural Land Policy (Decree D/2001/037/PRG) recognises customary rights and sets out proposals to reorient and improve the effectiveness of the existing statutory system. The focus is on clarifying and securing land tenure property rights in rural areas, including increasing the participation of local authorities and stakeholders. The policy also proposes a programme (Plan Foncier Rural) to inventory and harmonise existing traditional and statutory rights to land and other resources. This programme represents an attempt to create a synergy between land issues and poverty reduction strategies, with a view to protecting the rights of vulnerable or marginal social groups in rural areas.

Other relevant specific social legal texts as the Poverty Reduction Strategy Papers, National Agricultural Development Policy, Urban Code, Collectivities Code, and Animal Husbandry and Products Code are presented in Appendix D.

4.3 GUINEAN ENVIRONMENTAL LEGAL REGIME

The environmental legal framework is presented in two sections. The first one describes the overall environmental assessment authorisation process for industrial projects. The second one presents the main environmental legislation applicable to the Simandou Project.

4.3.1 Environmental Assessment Authorisation Process

The Guinean environmental assessment authorisation process, to which all mining projects are subject, is defined in the following main documents:

1. Presidential Decree No. 199/PRG/SGG/89 defining the mandatory requirements for the Environmental Impact Assessment (EIA) study (*Décret codifiant les études d'impact sur l'environnement*, November 8, 1989; the “EIA Codifying Decree”).
2. Presidential Decree No. 200/PRG/SGG/89 defining the approval process for classified installations for environmental protection (*Décret définissant le processus d'autorisation des installations classées pour la protection de l'environnement*, November 8, 1989, the “EIA Process Decree”). The technical nomenclature of classified installations for environmental protection is defined in the joint Order No. 993/8093/PRG/SGG of October 11, 1993.
3. Order No. 990/MRNEE/SGG/90 regulating the content, methodology and procedure of the Environmental Impact Assessment (March 31, 1990).

4.3.1.1 Decree Defining the Environmental Impact Assessment Study

The EIA codifying Decree (No. 199/PRG/SGG/89) states that an EIA is mandatory for all projects listed in an appendix to the decree. These projects include port, power plant, railway, road and mine construction and operation.

4.3.1.2 Decree Defining the Approval Process for Classified Installations for Environmental Protection

Decree No. 200/PRG/SGG/89 describes the procedures and requirements a project proponent must follow and meet when applying for an authorisation to build and operate a classified installation (Class 1). Simandou Project's three components (mine, port and railway) are considered classified installations and therefore are subject to the provisions of the decree.

The proponent submits his application for environmental and construction permits to the Ministry of Environment and the Ministry of Mines and Geology.

Articles 4 and 5 of the decree mention that an application for authorisation must include the following, among others:

- information on the project proponent;
- project location and maps;
- information on the nature of the project, proposed technologies, raw materials and products;
- environmental impact assessment report;
- workers health and safety plan; and
- emergency plan.

4.3.1.3 Order Defining Environmental Impact Assessment Study Content

Order 990 (March 31, 1990) establishes the content, methodology and procedures to be included in the EIA. This includes the following:

1. Project description (justification, location, investment costs, date of decision regarding investment, project schedule).
2. Baseline environmental analysis and description including the following parameters: geology, pedology; hydrogeology, hydrology; natural environment, fauna and flora; landscapes and sites; noise, odours, air quality, traffic and infrastructure, socio-economic activities.
3. Assessment of the project's predictable impacts on the site.
4. Description of alternative options (site and process) and reasons for which, from an environmental standpoint, the proposed project was selected.
5. Measures to be undertaken by the proponent or contractor to eliminate, reduce, and if possible, compensate for the damaging consequences of the project on the environment; and estimate of related costs.

4.3.2 National Monitoring Committee

A "National Monitoring Committee" for the Simandou Project SEIA was formed as a sub-committee of the greater Transport Committee - a forum for liaising with the

Government with regard to the identification and permitting of iron ore export solutions. The National Monitoring Committee arose from a Rio Tinto proposal within the “early works” Social and Environmental Impact Assessment (SEIA) and was supported by the Environment Minister. It is intended that the National Monitoring Committee will remain in place until the closure of the mine, and its main objectives are to:

- support Rio Tinto in coordinating and carrying out the SEIA and identifying the necessary national expertise;
- encourage effective and efficient communication by approving and communicating relevant information to the decentralised authorities (administrative/political/civil society) likely to be affected by the social and environmental impacts;
- increase their ministers’ awareness regarding the constraints and opportunities stemming from the social and environmental impacts and their effect on the Simandou Project FS.

This is also a capacity building opportunity for the committee members because of their involvement in an SEIA respecting international and institutional standards such as those of the Rio Tinto and IFC.

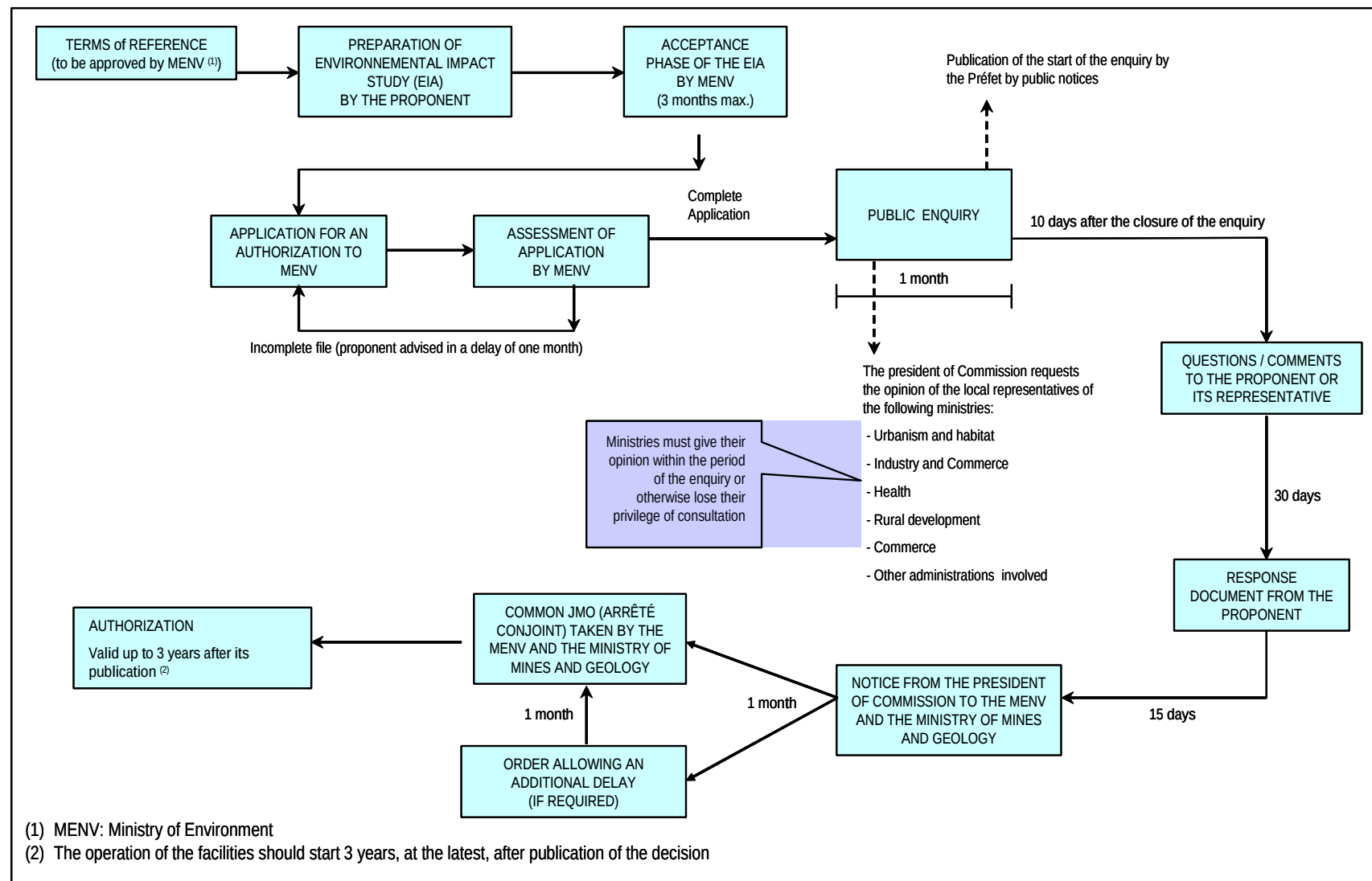
With regard to the mine component, the National Monitoring Committee is represented at the Prefecture level by a Prefecture Social and Environmental Monitoring Committee. The objective of the monitoring committee is to monitor performance against the social and environmental management plans approved during the assessment process. Separate local committees are likely to be required in other Prefectures where rail or port infrastructure is to be constructed.

4.3.3 Process Summary

The Guinean environmental impact assessment authorisation process is illustrated in Figure 4.1. This process includes a public enquiry in which a Review Commissioner is responsible for obtaining relevant comments from stakeholders, the public, the local leaders and the local representatives of the ministries interested or affected by the project. At the end of the 30-day public enquiry, the concerned ministries have 30 days to issue a Joint Ministerial Order (Arrêté) that either grants or refuses authorisation for the project to proceed, and determines the conditions to be met by the Proponent for the protection of the environment. This Ministerial Order is valid for a period of 3 years from the date of publication.

For the purposes of conducting, reviewing, validating and monitoring the results of the SEIA, the Ministry of the Environment issued Order No. 05074/ME/CAB/SGG, on 28 September 2006, establishing a National Environmental Study and Assessment Service (SNEEE), which in turn set up an Internal Review Board (CIA) to rule on the admissibility and compliance of the content of SEIA reports based on defined reference criteria.

Figure 4.1 Guinean environmental authorisation process for Class I industrial facilities



At the end of this procedure, the Internal Review Board issues a report on its findings. Thereafter, a restitution workshop for the SEIA must be organised in the project area by the firm carrying out the SEIA studies. This procedure is essentially meant to collect and record the concerns, suggestions and recommendations of all stakeholders in preparation of the final version of the SEIA report.

4.3.4 Guinean Environmental Legislation

This section presents the Guinean legislation applicable to the Pic de Fon Classified Forest as well as that applicable to the project as a whole.

The Guinean environmental legislation encompasses a series of laws, decrees, codes and regulations, the majority of which were adopted in the 90s, that are applicable to the Simandou Project. The most important of these environmental project-related legal texts are presented in this section.

4.3.4.1 Legislation Applicable to the Pic de Fon Classified Forest

Decree of Pic de Fon Classified Forest

The Pic de Fon forest (25,600 ha) was classified as a state forest in 1953 according to the Decree No. 8113/SE/F. The aim of the classification was to maintain minimum vegetation cover to:

- sustain the dense network of waterways, which have their sources in the Simandou Range and which feed the Loffa, Diani, Dion and other rivers;
- reinforce the natural barrier that the chain constitutes between the trade winds of the south and the harmattan of the north;
- preserve the forest and the soils; and
- preserve wildlife habitat and characteristic taxons for the future.

The decree acknowledges usage rights only to the inhabitants of the villages adjacent to the classified forest to:

- harvest the products of existing coffee plantations and cola trees on the date of the decree; and
- maintain crops and harvest products on lands under cultivation on the date of the decree.

N'Zérékoré Forestry Centre

The N'Zérékoré Forestry Centre (CFZ), which reports to the *Direction Nationale des Eaux et Forêts*, is currently responsible for the management of seven classified forests in Guinea Forest region, including the Pic de Fon, under the Presidential Decree S/2004/50/PRG/SGG of July 2004. The CFZ have a mandate to manage the forest and increase the value of forest resources whilst respecting the environment and its constituent biodiversity.

Rio Tinto and the CFZ have collaborated since 2002 to ensure the protection of the Pic de Fon Classified Forest, including GPS definition of forest boundaries, construction of surveillance posts, inventories of biological resources and bushfire control programmes.

Centre de Gestion des Monts Nimba et Simandou

By virtue of Order No. 2005/406/ME/CAB, the *Centre de Gestion des Monts Nimba et Simandou* (CEGENS) is mandated with the mission of coordinating and promoting protection activities and sustainable development of the resources in those mountains and their areas of influence.

4.3.4.2 Legislation Applicable to the Project

Environment Code

This Code (Order No. 045/PRG/SGG/87) provides general guidance to ensure that physical, natural and human environments are protected and that environmental nuisances (i.e., solid wastes, hazardous substances, noise, odours) are minimised. The law also specifies that all projects that could potentially harm or jeopardize the environment are subject to an environmental assessment process.

Some articles of the Code were modified according to the Order No. 022/PRG/SGG/89.

Water Code

The Water Code (Law L/94/005/CRTN; February 14, 1994) establishes a system of water use rights and sets the overall framework for managing water resources. The Code states that a concession is granted by decree for permanent water uses, such as supplying potable water to towns and villages, hydropower, agricultural, industrial or other developments, requiring investments whose amortisation period exceeds 10 years.

The Code states that any use of water resources must comply with the guidelines of the development plan of the watershed containing these resources. The Code also addresses the prevention of the harmful effects of waters and the protection of water quality.

The Water Code addresses groundwater issues, and more specifically the measures governing the exploration, exploitation and protection of groundwater sources. The arrangements for establishing protection perimeters, defining water resource safeguard areas and issuing drilling permits are determined by the *Direction Nationale de l'Hydraulique* (DNH).

Forest Code

The Forest Code (Law L/99/013/AN; June 22, 1999) is designed to protect and develop Guinean forests using proper management procedures in order to meet current and future needs. A national forest policy, which has led to the development of a national forest plan, is already in place. The national forest plan sets objectives to be met and provides a description of the status of forest resources, an estimate of the needs for forest products, and a programme of actions to protect and develop forests.

Regional and prefectural forest plans are developed to adapt the national forest policy to regional and prefectural specificities. These plans have the same content as the national forest plan but they reflect the needs and circumstances of the regions and prefectures concerned.

Based on the Forest Code, the forest estate consists of State-owned forests, the forest estate of decentralised collectivities, districts and villages, the private forest estate and unclassified forests. Forests classified before the Forest Code came into force are included in the State-owned forest estate.

Under the Forest Code, a plot of land cannot be cleared without authorisation and any clearing must be accompanied by a reforestation operation equivalent in quality and size to the clearing. With regards to mining activities and construction works of transportation ways planned in the forest estate, the Code states that they must be authorised by the Forestry Minister and must not be undertaken prior to the issuing of a pruning or clearing permit. This authorisation must specify the protection and restoration measures to be undertaken by the permit holder.

To prevent bush fires, the Code stipulates that anyone who lights a fire outside population centres, homes and schools, for any purpose, shall take steps to prevent the fire from escaping control and spreading into the forest estate.

A joint ministerial Order (Order No. 654) aiming the harmonisation of the Mining Code with the Forest Code is to ensure mutual consultation between the Mines Minister and the Forestry Minister before mining or logging licenses are established or issued (see Appendix E for more details).

Wildlife Protection Code and Hunting Regulations

The Wildlife Protection Code and Hunting Regulations (Law No. L/97/038/AN) seeks to establish principles for the protection, conservation and management of wildlife and its habitats, to recognise the rights to hunt and guide hunting practice in order to promote the rational and sustainable use of animal species with a view to meeting human needs.

A National Wildlife Policy has been established which sets the objectives and includes a description of the status of wildlife resources, their environments and habitats, a programme for actions to be undertaken to ensure their conservation, rehabilitation

and development, an estimate of investment required, and any other information needed for the implementation of the National Wildlife Policy.

The Code states that national parks, integral nature reserves, managed nature reserves, special wildlife reserves or sanctuaries, hunting reserves and hunting areas can be created on Guinean soil in order to ensure wildlife conservation and management.

Other relevant legislation addressing specific topics, as Law on Continental Fishing, Decree on Hazardous Chemicals and Law on Explosives is presented in Appendix E.

4.3.5 Guinean Biodiversity Policy

Guinea signed the Convention on Biological Diversity at the United Nations Conference on the Environment and Development held in Rio de Janeiro in June 1992. It was subsequently ratified on 7 May 1993. Guinea thus became the second African country to sign the Convention and the 16th of all the contracting parties.

The Ministry of Environment's National Branch for the Protection of Nature (DNPN) is responsible for applying the Convention, which is the focal point of the country's biodiversity policy.

By signing and ratifying the Convention, Guinea has undertaken to adopt general measures to promote conservation and sustainable use of biological diversity, identify and use in a sustainable manner the components of this biodiversity, and conduct *in-situ* conservation. These measures are being carried out through different policies on sustainable use of biodiversity through various agencies responsible for implementing these policies. The main biological diversity sustainable use policies being implemented in Guinea are:

- National Action Plan for the Environment (PNAE);
- National Forest Action Plan;
- Mangrove Forest Development Master Plan;
- Energy Sector Study Programme;
- National Sustainable Human Development Programme;
- Action Plan for the Promotion of Women;
- Framework Programme to Promote Civil Society Decentralisation and Capacity Building;
- Framework Programme to Support Basic Initiatives.

4.4 GUINEAN LEGAL REGIME FOR INVESTMENT

The Ministry of Commerce, Industry and Small and Medium Enterprises (MCIPME) is responsible for defining, implementing, monitoring and coordinating the Government's trade and industrial policy. Since 2003, Guinea also has a National Committee for international negotiations, an inter-ministerial structure that has ensured the

participation of Guinea in the World Trade Organization (WTO). The inter-ministerial structure also tracked the commercial aspects of the agreements of the Economic Community of West African States and the Joint Parliamentary Assembly of the African, Caribbean, Pacific and European Union States. Within the public administration, the Economic and Social Council must be consulted to discuss projects, programmes or proposed laws and draft decrees of economic and social nature submitted for evaluation, with the exception of finance laws. The Fundamental Law makes this consultation mandatory and attributes this important role to the Council (Article 87).

However, Guinea has no Commercial Court. Economic affairs are handled by the courts of law with the exception of matters relating to disputes between the Guinean State and foreign nationals on the application of the Investment Code. It should be noted that Guinea's current trade policy is a continuation of economic liberalisation reforms initiated in 1984 and reported at the time of the first review of its trade policy in 1999.

The specific objectives in the development of trade exchanges include the promotion of exports of agricultural and fisheries products, the non-mining sector, handicrafts and tourism. Guinean authorities are unquestionably continuing to focus on expansion of the mining sector, as it is a booming and promising sector for the country. However, they would like more processing activities locally in order to increase the added value of the Guinean economy. The authorities also hope to encourage the creation of Small and Medium-sized Enterprises (SMEs).

Guinea is a member of the Organization for the Harmonisation of Business Law in Africa (OHBLA) which includes a dozen African countries. OHBLA has helped harmonise the rules applicable to the transportation of goods by land, company law, general commercial law (which contain provisions for commercial sale but not for services), accounts, securities, arbitration, enforcement methods and finally to collective bankruptcy and insolvency procedures. The protection of intellectual property and investment promotion has been reformed to make investors feel secure, since these laws have now come into force.

The Investment Code is intended to encourage foreign investment in order to promote the development of SMEs to develop local resources and promote exports. The Investment Code establishes the guarantees granted to investors and the advantages of different regimes and defines their obligations. The investors are obligated to employ, in priority, Guinean nationals with equal qualifications, and to organise training and the promotion of Guinean nationals within the company.

To promote the creation of productive employment, the Investment Code provides a set of tax benefits associated with privileged regimes if the activity or its extension contributes to the achievement of one or more of the priority economic and social development objectives. These privileges depend on the country's objectives and priority areas: the promotion of SMEs in Guinea, the development of nontraditional

exports, the valorisation of products through processing in Guinea, the use of local natural resources and raw materials; the implementation of activities in the country's less developed areas economically, etc.

A table summarising the advantages given to SMEs related to privileged regimes is presented in Appendix F.

4.5 LAND ACQUISITION AND COMPENSATION REGIME

Two options are available to obtain the necessary rights on land required for the Simandou Project implementation:

- The Expropriation process, through a Decree of Public Interest (*Déclaration d'Utilité Publique* - DUP) according to the Land Tenure Code of Guinea.
- The Compensation process under the Mining Code allows compensation for the owners and occupants.

Table 4.2 compares the two procedures and Figure 4.2 illustrates the expropriation process according to the Land Tenure Code.

Given the magnitude of the project, the expropriation process according to provisions in the Guinean Constitution and associated *PIN-DUP* (Decree of Public Interest which allows the government to expropriate land for a Project of Public Interest (*Projet d'Intérêt National* - PIN) will be preferred to the Mining Code occupation process.

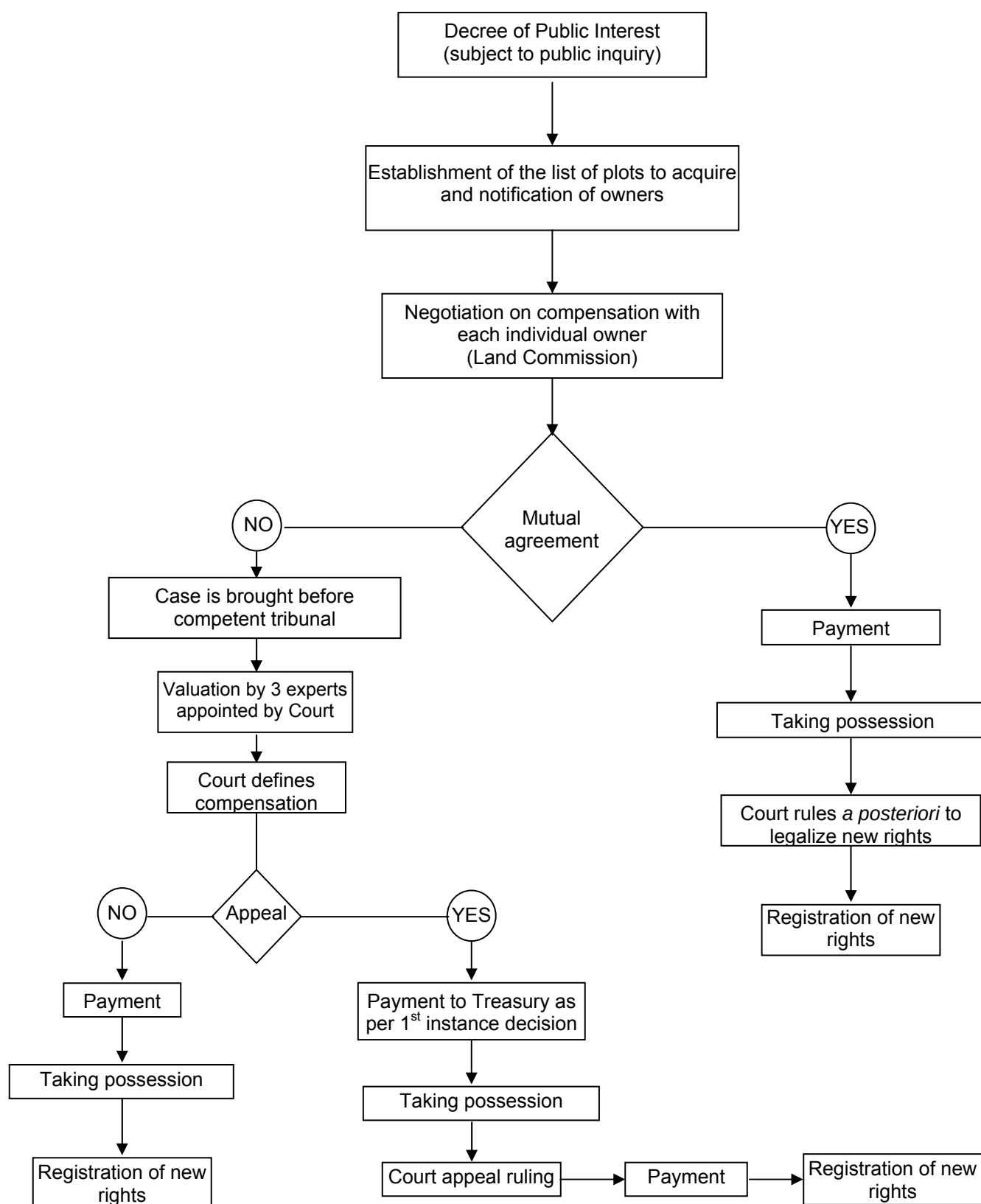
Table 4.2 Comparison of options for acquisition of land rights

Topic	Expropriation	Compensation
Extent of rights obtained upon land	Acquisition, by SIMFER S.A., or by another entity leasing land to SIMFER under a long-term lease (<i>"emphytéose"</i>). All pre-existing rights and encumbrances are extinguished. There is no requirement to return land after the end of operations.	Occupation deemed temporary until land is reclaimed and returned to previous use and previous land users. No legal basis is provided for the extinction of pre-existing or conflicting rights; therefore return of pre-existing rights after the end of operations is required.
Procedural requirements	Refer to Figure 4.2	Concession Title needs to be in the name of SIMFER S.A. for SIMFER to be legally able to carry out compensation and occupation of land. Once this Concession title is obtained, there are no additional procedural requirements, and compensation and/or resettlement may proceed.

Topic	Expropriation	Compensation
Government involvement	Government is heavily involved in the expropriation process, and specifically needs to undertake two procedures (Declaration of Public Interest, then “ <i>arrêté de cessibilité</i> ”) which require respectively a public inquiry and a plot inquiry. Then Government is involved in all steps of the expropriation process through a dedicated expropriation commission.	None in law, but SIMFER S.A. will seek, at its own initiative, Government involvement and/or endorsement in identification and valuation of affected rights/persons.
Justice involvement	Justice final clearance is required to finalise expropriation and “extinguish” all pre-existing rights. Also, cases are brought to the court if mutual agreement is not reached.	No involvement unless disputes are brought to court.
Rights of affected people	Guaranteed under Article 13 of the Fundamental Law (Constitution) of Guinea (“compensation is fair and prior”), with details provided by the Land Tenure Code in terms of appeal to court and associated procedures. Taking of possession may still occur notwithstanding the course of the appeal.	Protection of affected persons’ rights appears to be weaker as this process is not considered deprivation of property per the Constitution and therefore does not trigger the associated judicial mechanisms that are intended to protect human rights.
Cut-off date	The cut-off date in the sense of IFC Performance Standard 5 can be clearly defined with a robust legal basis; it is either the date of the “ <i>DUP</i> ”, or the date of the “ <i>arrêté de cessibilité</i> .”	No legal basis for a cut-off date. This entails risks related with potentially unclear eligibility criteria, and potential problems in dealing with opportunistic immigration.
Summary - Main advantages and challenges	The expropriation process provides a comprehensive legal framework for land acquisition, with Justice involvement in grievance and conflict management if needed. It requires heavy involvement of the Government, particularly to pass the initial legal acts that trigger the process (<i>DUP</i> and “ <i>arrêté de cessibilité</i> ”).	The occupation process per mining code is much simpler to put in place, as the Concession Title is the only legal act required. However, the legal framework is less complete, particularly with respect to conflict management and to the cut-off date.

Source: Jay and Giovanetti 2007

Figure 4.2 Main steps of the expropriation process according to the Land Tenure Code of Guinea



Source: Jay and Giovanetti 2007

There are disparities between the Guinean legislation and the IFC requirements when it comes to compensation, involvement of affected people in the resettlement options, the concept of vulnerable groups, and assistance and follow-up of displaced people. Table 4.3 compares the requirements of the Guinean legislation to those of IFC in terms of compensation.

Table 4.3 Comparison of Guinean Law and IFC requirements regarding resettlement/compensation

Topic / Impact	Guinean Law	IFC requirements
Impacts on titled land owners	“Fair and prior” cash compensation. No detailed provisions as to the calculation of compensation. No provisions as to resettlement/relocation or “land-for-land” compensation. No entitlement to specific assistance triggered by displacement/relocation. People who lose only part of a plot can require expropriation of the whole plot.	Strongly recommend land-for-land compensation. Compensation is a replacement cost and is viewed as one of many elements within a comprehensive rehabilitation strategy (“no worse-off if not better-off” requirement).
Impacts on customary land users	Article 39 of the Land Tenure Code indicates that “bona fide” occupants can be granted the same benefits in terms of compensation for developments (structures, land improvements, crops) as titled owners.	Whatever the legal recognition of their occupancy, all people must be compensated along the same principles as legally recognised owners (“treat customary and formal rights as equally as possible in devising compensation rules and procedures”), except that customary owners are not eligible to cash compensation for land as customary held land is deemed to be formal property of the State.
Impacts on land tenants and sharecroppers	Article 59 can be interpreted as granting “occupants and well known users” with rights to compensation.	Not entitled to compensation for land, but income must be restored as long as the loss of land causes loss of income.
Impacts on structures	Buildings are part of the immovable assets that are eligible for compensation in the event of expropriation or occupancy. No detailed guidelines other than the general “fairness” principle. Assets that are not lost but cannot be used any more are eligible for compensation.	In-kind compensation or cash compensation at full replacement cost including labour.
Impacts on crops	Cash compensation based upon unit rates established in 1987 by the Ministry of Agriculture.	Transition period between planting and effective production should be taken into account as part of livelihood restoration. This period may be more than one year for fruit trees and some other crops.

Topic / Impact	Guinean Law	IFC requirements
Impacts on business income	Not addressed specifically.	Establish access to similar opportunities and restore incomes.
Impacts on livelihoods and livelihood restoration	Not addressed specifically.	It is required to <i>“improve or at least restore income-earning capacity, production levels, and standards of living”</i> .
Impacts on vulnerable groups	Not addressed specifically.	It is required to identify and assist vulnerable groups.
Monitoring and evaluation	Not addressed specifically.	Monitoring and evaluation should be ongoing during and after resettlement activities.
Consultation	No specific requirement related to resettlement and compensation but there are consultation requirements in relation with SEIAs.	Consultation with PAPs and other stakeholders is required. Outcomes of consultation must be reflected in the action plans. Consultation is expected to be ongoing during implementation of resettlement and monitoring activities.
Documentation	No specific document addressing resettlement and compensation is required from a Project sponsor beyond the usual SEIA. Recent practice from Ministry of Environment has, however, been that where projects entail resettlement and compensation, SEIAs should address these impacts in detail.	It is required to develop a Resettlement Action Plan or Resettlement Framework, to consult upon it, and to disclose it to interested parties.

Source: Jay and Giovanetti 2007

4.6 PERMITS AND AUTHORISATIONS

For projects governed by the Mining Code, most of the processes have been streamlined and centralised under the Ministry of Mines and Geology or the Centre for Mining Development and Promotion. In some specific cases, such as the import and use of explosives, the procedure for obtaining the necessary permits is established by a Joint Ministerial Order.

In the case of the Simandou Project, the Convention takes precedence over the general provisions of Guinean law (including the Mining Code) to the extent of any inconsistency. In the Convention, the State has a commitment (Article 33.4) to provide all permits and authorisations required for the timely execution of the Project and for the exercise of the rights and guarantees contemplated elsewhere in the Convention. This is supported by a broad range of guarantees regarding construction activities, access to land and transfer of funds, among other things.

Notwithstanding this commitment, a number of statutory preconditions must still be met before certain activities can proceed. Mining and exploitation of the iron ore deposits of

the Concession are strictly contingent on the development of schemes for roads, railways, port facilities and related installations. Activities and works requiring special permits and authorisations are detailed in Table 4.4.

Table 4.4 List of required permits and authorisations for the Simandou Project

Legislation	Responsible Authority	Permit/Authorisation
Mining Code and Mining Convention	Ministry of Mines and Geology	Mining concession
		Opening and operating of a quarry or borrow pit, excavation and earthworks
		Transport infrastructure development permit (road, railway, port)
		Specific authorisation for components outside the concession limits: airstrip, port, railway, land clearing, water use, roads, conveyer, pipeline
Forest Code	Ministry of Agriculture, Livestock, Waters and Forests	Tree felling permit
		Land clearing
Water Code	Ministry Energy and Hydraulic	Water crossing
		Use of water
		Construction of well/borehole
		Groundwater protection
		Discharge water
Urban Code	Ministry of Urban planning	Construction/demolition of buildings
		Project of National Interest (PIN)
		Decree of Public Interest (DUP)
		Road construction or upgrading
		Land title acquisition
Law on arms, ammunition, gunpowder and explosives	Ministry of Territorial Administration and Security (Department of Interior)	Importing and transport of explosives
	Ministry of Mines and Geology	Use of explosives
Environment Code	Ministry of Sustainable development and environment	Social and Environmental Impact Assessment Study
		Notice for building
		Approval for a quarry rehabilitation plan
Transport Code	Ministry of Transport	Operation of an airstrip
		Operation of a port

4.7 INTERNATIONAL AGREEMENTS SUPPORTED BY GUINEA

Guinea is party to several international agreements. The signing of an agreement is first step prior to ratification (including accession), which is the final step whereby a country takes specific legal steps to implement the agreement. Table 4.5 provides a brief description of the relevance of the signed and ratified agreements to the Project.

Table 4.5 International agreements to which Guinea is party

International agreements Location and year of adoption, purpose of agreement	Action by Guinea
Convention Relative to the Preservation of Fauna and Flora in their Natural State, London, 1933 This convention aims to protect particular species of flora and fauna through nature reserves within which the hunting, killing or capturing of fauna, and the collection or destruction of flora shall be limited or prohibited. It was the first legal instrument permitting protection of flora and fauna in Africa.	Accession 1936
International Plant Protection Convention, Rome (1951) This convention is a multilateral treaty establishing standards for international phytosanitary trade measures to protect plants against harmful organisms and providing for an international forum for the sharing of knowledge with regard to plant protection.	Effective 1952 Amendments 1979 and 1997
African Convention on the Conservation of Nature and Natural Resources, Algiers (1968) This convention is intended to “enhance protection of the environment, promote conservation and sustainable use of natural resources, harmonise and coordinate policies in these areas, and establish development policies and programmes that are ecologically rational, economically sound, and socially acceptable.”	Ratification 1989
Ramsar Convention on Wetlands of International Importance (1971) The conservation and wise use of wetlands by national action and international cooperation as a means of achieving sustainable development throughout the world.	Ratification 1993
World Heritage Convention, Paris (1972) This convention addresses the identification, protection and preservation of natural or cultural sites having exceptional universal value. Such sites are registered in the World Heritage List established by the Convention.	Adopted 1979
Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), Washington (1973) This convention regulates international trade to safeguard species (flora and fauna) in danger of extinction.	Adopted 1981
Convention on Migratory Species, Bonn (1979) The goal of this convention is to conserve and preserve migratory species and their habitat (land, sea and air) over their entire migration area.	Ratified 1992

International agreements Location and year of adoption, purpose of agreement	Action by Guinea
Vienna Convention for the Protection of Ozone Layer (1985) Through this convention, nations agreed to take “appropriate measures...to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the Ozone Layer.”	Accession 1992 Ratification 1993
Montreal Protocol on Substances that Deplete the Ozone Layer (1987) An international agreement designed to protect the stratospheric ozone layer.	Accession 1992
Convention on Biological Diversity, Rio de Janeiro (1992) This convention was an agreement on developing national strategies for the conservation and sustainable use of biological diversity.	Ratification 1993
Convention on Climate Change, New York (1992) - The United Nations Framework Convention on Climate Change has been the centerpiece of global efforts to combat global warming. It also has been one of the international community's essential tools in its efforts to promote sustainable development. - With respect to air pollution, Guinea has drawn up its national policy statement on climate change and its second draft communication was reviewed in October 2006.	Ratification 1994
United Nations Convention to Combat Desertification, Paris 1994 - The purpose of this convention is to correct ecological, economic and social imbalances stemming from soil deterioration and the destruction of production systems, especially in the world's poorer countries. - With respect to desertification, Guinea's position has been developed and reviewed by a national forum, the PAN/LCD (National Action Programme to Combat Desertification).	Ratification 1997
Kyoto Protocol to UN Framework Convention on Climate Change (1997) The Protocol was adopted in December 1997 in Kyoto, Japan to achieve quantified emission limitations and reduction commitments of greenhouse gases (GHG) in developed countries and countries that are undergoing the process of transition to a market economy.	Signed 2000
Cartagena Protocol on Biosecurity (2003) The protocol was adopted in 2003. It aims to reduce the potential negative effects of biotechnology on biodiversity.	Ratification 2007
African Charter on the Rights and the Welfare of the Child (1990) The Charter guarantees to every child (under 18) the inherent right to life, education and health; it also guarantees protection from all forms of economic exploitation. Death sentence shall not be pronounced for crimes committed by children and recruiting any child in armed conflicts must be refrained from.	Ratification 1999
African (Banjul) Charter on Human and Peoples Rights , Nairobi (1981) The African Charter on Human and Peoples Rights (also known as the Banjul Charter) is an international instrument for the promotion and protection of human rights and freedom on the African continent.	Ratification 1982

International agreements Location and year of adoption, purpose of agreement	Action by Guinea
Convention on the Elimination of all Forms of Discrimination against Women – CEDAW (1979) The CEDAW is often described as an international bill of rights for women. It defines what constitutes discrimination against women and establishes an agenda for national action to end such discrimination.	Ratification 1982

4.8 INTERNATIONAL AGREEMENTS SUPPORTED BY RIO TINTO

Rio Tinto endorses and supports several international agreements. Table 4.6 presents the international agreements that are the most relevant to Simandou Project.

Table 4.6 International agreements supported by Rio Tinto

International agreements	Supported by Rio Tinto since
Global Sullivan Principles of Social Responsibility The main points of the Principles are to: - Support universal human rights, particularly those of employees and communities. - Promote equal opportunity for employees at all levels. - Respect employees' voluntary freedom of association. - Compensate employees to enable them to meet basic needs. - Provide a safe and healthy workplace. - Promote fair competition. - Work with communities and governments to improve the quality of life; and - Promote the Principles with those with whom we do business.	1977
International Labour Organization Convention 169: Concerning Indigenous and Tribal Peoples in Independent countries The basic concepts of the Convention are respect and participation. Respect for the peoples culture, spirituality, social and economic organisation and their identity, all constituting essential premises regarding the enduring nature of indigenous and tribal peoples.	1989
International Labour Organization (ILO) Declaration on fundamental Principles and Rights at Work The primary goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity.	1998
United Nations Global Compact The principles of the Global Compact relating to human rights and environmental and labour standards seek to support and respect the protection of international human rights within the sphere of influence of the participants; and to ensure no complicity in human rights abuses.	1999
US/UK Voluntary Principles on Security and Human Rights The Principles assist companies in maintaining the safety and security of their operations within a framework that ensures respect for human rights. The	2000

International agreements	Supported by Rio Tinto since
Principles also provide guidance for companies on identifying human rights and security risk, as well as engaging and collaborating with state and private security forces. Rio Tinto not only supports the Voluntary Principles on Security and Human Rights issued by the US and UK governments in 2000, it was involved in the first steps to develop the principles with the aid of non government organisations.	
Extractive Industries Transparency Initiatives (EITI) EITI aims to strengthen governance by improving transparency and accountability in the extractives sector.	2003
International Council on Metals and Minerals (ICMM) Sustainable Development Framework The 10 ICMM Sustainable Development Framework Principles are: 1. Implement and maintain ethical business practices and sound systems of corporate governance. 2. Integrate sustainable development considerations within the corporate decision-making process. 3. Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities. 4. Implement risk management strategies based on valid data and sound science. 5. Seek continual improvement of our health and safety performance. 6. Seek continual improvement of our environmental performance. 7. Contribute to conservation of biodiversity and integrated approaches to land use planning. 8. Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products. 9. Contribute to the social, economic and institutional development of the communities in which we operate. 10. Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.	2003

4.9 RIO TINTO POLICIES, STANDARDS AND GUIDELINES

In its statement entitled “The Way We Work,” Rio Tinto established its commitments regarding corporate policies and governance. These commitments aim to ensure that the company’s values and best practices are reflected in the day-to-day activities of all employees. These values and best practices relate mainly to accountability, fairness, integrity and openness.

In keeping with its commitments, Rio Tinto will also ensure that the standards adopted for the project will meet the best practices recognised by the industry as well as those of the Guinean government, the International Finance Corporation (IFC) and Rio Tinto’s own internal guidelines.

The project will prepare environmental design criteria and principles to provide designers of permanent facilities with practical advice and guidance in regards to their

environmental obligations. The prime objective is to achieve designs that satisfy all environmental requirements, comply with all regulations and have minimal environmental impact.

4.9.1 HSEC Policies

The Simandou Project follows Rio Tinto's corporate policies and guidelines. To structure its various operations and activities (including projects and mineral exploration), Rio Tinto adopted nine specific policies regarding communities, employment, environment, human rights, land access, occupational health, political engagement, safety and sustainable development (Table 4.7).

Table 4.7 Rio Tinto's Health, Safety, Environmental and Community Policies

Topic	Policy overview
Communities	This policy is designed to develop lasting relations with the communities in which Rio Tinto carries out its projects by establishing relations based on mutual respect, active partnership, and long-term commitment.
Employment	The purpose of this policy is to provide a healthy, safe and productive workplace free of accidents and of all forms of discrimination and harassment. Rio Tinto is also committed to promoting corporate values and practicing ethics that lead to good behaviour at work.
Environment	Rio Tinto adopted this policy to comply with international laws, standards, and regulations governing the environment. Its environmental performance is based on a management system and partnership with the environment designed to prevent, reduce, or eliminate environmental risks resulting from its activities.
Human rights	By adopting this policy, Rio Tinto is committed to respecting human rights and having its employees, partners and communities concerned do the same, in conformance with the U.N. Universal Declaration of Human Rights. The company must also ensure that no uses of its equipment or facilities violate these rights. Under this policy, the company also agrees to promote a better understanding of human rights.
Land access	This policy ensures that the company will adopt an inclusive, consultative, and participatory process in order not to prejudice anyone's rights in the course of land acquisitions. To do so the company adopts a transparent process, based on tradition and legislation, to satisfy land claims and pay fair and equitable compensation. The company also acknowledges the importance of respecting areas that are protected or recognised as world heritage sites. Rio Tinto will also develop some land dedicated to purposes other than mining to meet employee and local community needs in matters of education, lodging, health and leisure, food production, forest exploitation, habitat protection, and biodiversity conservation. The company is committed to rehabilitating the land at the end of the operating period, in conformance with good environmental practices and existing laws and regulations.
Occupational health	By applying this policy, the company seeks to control and prevent diseases associated with the functions of its employees, thereby providing them with a workplace that contributes to the maintenance of good physical health. The company conforms to this policy through a training programme and quality assurance measures (audits, observations, periodic reports).
Political	By supporting this policy, Rio Tinto promises not to contribute to any political

Topic	Policy overview
involvement	party or promote any male or female politician. However, the company does plan to promote its commercial interests by way of public dialogue and contributing to the development of sound and effective legislation and regulations for society as a whole.
Safety	The ultimate goal of this policy is to provide employees with an accident-free workplace. In addition to providing continuous training and encouraging employee vigilance, the company also relies on a preventive approach to eliminating all workplace accidents by identifying potential hazards and risks.
Sustainable development	Rio Tinto acknowledges the importance of contributing to sustainable development by incorporating this concept into its activity plans and decision-making process. By giving priority to the well being of the local population, preservation of the environment, sustainable resource management, and management systems, the company ensures its compliance with local and international sustainable development standards.

Source: Rio Tinto 2010

4.9.2 Corporate Standards

Rio Tinto Health has developed a global HSE programme whereby all Group businesses are required to meet the same standard of practice. Policies, strategies, standards, internal controls, performance indicators and targets, along with technical systems and tools, are developed to help manage risk and improve HSE performance.

The Rio Tinto Health, Safety, Environment and Quality Management (HSEQ) System Standard was developed to ensure a common approach to managing HSE performance and achieve ongoing improvement. While the primary focus of this Standard is to manage health, safety and environmental performance, quality management has also been integrated to provide for businesses with quality programmes.

In addition to the HSEQ management system standard, Rio Tinto has a number of HSE performance standards that address specific areas of risk and are mandatory for all Group businesses. There are four standards categories regarding Communities, Environment, Occupational Health, Safety, and Closure as presented in this section. The Rio Tinto internal standards are applicable to all phases of a project, from exploration and development through operations to closure.

The HSEQ management system integrates these standards and their requirements throughout the four-phase cycle Plan, Do, Check, Review that encompasses 17 elements. Each element sets out to achieve a specific objective that enables a business or site to best identify and manage its various HSEQ threats and opportunities. These elements and their respective objectives are listed in Table 4.8.

Every element includes a number of clauses, which spell out the minimum requirements to meet each objective. Some of the elements refer to set processes that must be followed, and these are defined in additional documents called “work cycles”. All elements are supported by individual Guidance notes and other supporting references.

Table 4.8 Rio Tinto Health, Safety, Environment and Quality Management System Standard

Cycle of the Management system	
Plan	Objective
Element 1 Policy	Develop a policy that establishes a clear set of values and objectives for the effective management of health, safety, environment [and quality] (HSEQ) performance. It must be consistent with Rio Tinto's codes of business practice.
Element 2 Legal and other requirements	Comply with all legal and other HSE[Q] requirements. Conform to internal Rio Tinto standards, policies and other obligations.
Element 3 Hazard identification and risk management	To analyse and manage HSE[Q] risks using a common approach.
Element 4 HSEQ Management improvement planning	Establish processes and plans to manage HSE[Q] performance and to provide for continual improvement.
Do	Objective
Element 5 Organisational resources, accountabilities and responsibilities	Ensure resources, responsibility and accountability are appropriately allocated for the maintenance and continual improvement of HSE[Q] management.
Element 6 Training, competency and awareness	Establish processes to provide the requisite training, competency and awareness to effectively manage HSE[Q] risks.
Element 7 Supplier and contractor management	Ensure HSE[Q] risks associated with procured materials, equipment, services and labour are effectively managed
Element 8 Documentation and document control	To distribute and control documentation required for the effective operation of the management system.
Element 9 Communication and consultation	To effectively engage with stakeholders on the management of health, safety, environment [and quality] by establishing processes focused on encouraging communication of HSE[Q] matters at all levels within the business and with external stakeholders and customers.
Element 10 Operational control	Manage the HSE[Q] risks associated with the business or site's work activities. This will be achieved by implementing the HSE performance standards, as well as other mandated or necessary risk treatment processes to control the risk to As Low As Reasonably Practicable.
Element 11 Management of change	Manage the HSE[Q] risks associated with any change to business processes by establishing a procedure to identify and manage changes to business processes that impact on HSE[Q].
Element 12 Business resilience and recovery	To ensure that the appropriate resources and incident response plans are prepared, practiced and available. The plans will provide an effective response for the mitigation, control and recovery from incidents which can impact or disrupt the business and/or its managed

	site(s) and activities.
Check	Objective
Element 13 Measuring and monitoring	To measure hazards, aspects or the impact of Rio Tinto activities and evaluate the effectiveness of controls. To monitor the workplace, environmental performance criteria, or product specifications to determine conformance and compliance.
Element 14 Non conformance, incident and action management	Ensure all incidents and lessons learnt are recorded and corrective actions identified and communicated through processes and procedures for the management of all incidents.
Element 15 Data and records management	To manage and maintain all data requirements for the management system and ensure the currency and security of records.
Element 16 Performance assessment and auditing	To regularly evaluate and report on performance and measure conformance to the management system requirements through audits and inspections.
Review	
Element 17 Management review	Ensure the business or site's management system is efficient and effective in managing HSE[Q] performance and meeting Rio Tinto and other requirements.

Source: Rio Tinto 2010a

A series of Operational Guidelines, such as those regarding commercial integrity and enterprise governance, which regulate the various operations and company policies complement this reference framework.

4.9.2.1 Communities Standard

To ensure that its Communities Policy will be implemented, Rio Tinto has developed a Communities standard. The Communities standard requirements are presented in Table 4.9.

Table 4.9 Rio Tinto Communities standard

Community Standard	Requirement overview
Multi year communities plans	Multi year communities plans should provide a clear link between business outcomes, permits for an expansion or maximising local employment for example, and community relation activities. Each multi-year communities Plan has time horizons to match business planning arrangements and have rolling, annual update. Each section of the plan needs to follow a progression that ties into the baseline communities assessment through the consultation strategy to the assistance undertaken.
Baseline communities assessments	Baseline communities assessments (BCA) are carried out first and provide the factual information that is needed to build the communities programme. The BCA identifies the communities directly affected by the business and those communities who can directly affect the business. It provides relevant data on socio-economic status and the like. In addition, it is important that the baseline sets out difficulties or changes occurring prior to the commencement of the operation.
Mutually	Consultation procedures are developed using the information gained from the

Community Standard	Requirement overview
accepted and understood consultation procedures	BCA. They are consistent with preceding and subsequent sections of the plan. They set out how consultations are undertaken, who with, and the formal and informal mechanisms to be used. The consultation procedures should set out how mutual understanding will be developed. There should be specific goals towards which the consultations are aimed.
Community assistance	Community assistance is agreed based on information from the BCA and consultations. The plan should set out the rationale for the initiatives undertaken and the mutual benefits which the business and communities expect to secure. Importantly, the plan should also describe the desired end point of particular initiatives or the strategy for devolving responsibility for the initiative to another party. The plan describes the indicators that have been developed and agreed with communities, to monitor the effectiveness of the assistance provided.
Cultural heritage	Cultural heritage features that are on the business land holdings are described by the plan. The plan might also describe how any reputational gains are to be secured through heritage work and consultation undertaken by the business. This should ensure culturally appropriate custodianship and mechanisms to preclude accidental impacts to heritage features.
Resettlement of communities	Resettlement of communities should only be undertaken using: a) the World Bank's Safeguard Policy on Involuntary Resettlement as a minimum; b) after advice is sought from Rio Tinto External Affairs; and c) with the explicit support of the relevant product group head.
Legally binding agreements with communities	Legally binding agreements with communities should be: a) the subject of advice from Rio Tinto External Affairs and the business Legal Department; and b) with the support of the relevant product group head.
Compensation payments	Compensation payments proposed should follow: a) procedures that are consistent with established good practice; b) advice from Rio Tinto External Affairs; and c) with the explicit support of the relevant product group head.
Foundation, trusts or community funds	If a foundation, trust or community fund is to be established, it should conform to: a) current Group guidance on such instruments; and b) advice from Rio Tinto External Affairs.

Source: Rio Tinto 2010

4.9.2.2 Environment Standards

A series of nine specific environment standards summarise the management requirements to meet. The targeted objectives for each of these standards are presented in Table 4.10.

Table 4.10 Rio Tinto corporate Environment standards

Environmental standard	Objective
E2 Air quality control	The intent of this standard is to ensure that Rio Tinto operations have identified and minimised air pollutant emissions and their potential impacts from their activities. This is to be accomplished by evaluating and prioritising them according to the significance of their impact, and taking effective measures to design and implement appropriate controls of emissions to ensure protection of ambient air quality.
E3	The intent of the standard is to ensure that Acid Rock Drainage

Environmental standard	Objective
Acid rock drainage prediction and control	(ARD) risks for Rio Tinto projects and operations are effectively identified through all phases of a mine and managed to prevent or minimise adverse environmental impacts and to reduce long-term costs and liabilities. The standard applies to issues related to the potential release of sulphide oxidation products including the formation of acidic and/or saline soils and wastes, the release of low pH water or water with a neutral pH but elevated sulphate-dominated salinity or metals concentrations. The term ARD as used in this standard refers to the potential environmental impacts that could result from the oxidation of sulphide minerals such as pyrite. The emphasis is on timely and thorough analysis of the risks, early identification and implementation of control (management) strategies and thorough integration of controls with mine planning and operational activities.
E4 Greenhouse gas emission	The intent of this standard is to ensure continuous improvement in GHG emission minimisation in Rio Tinto, including through improved efficiency in energy use. This is to be accomplished by identifying GHG sources, evaluating and prioritising them according to significance, and then designing and implementing a greenhouse gas and energy efficiency action plan containing the appropriate control, reduction and mitigation measures.
E5 Hazardous materials and contamination control	The intent of this standard is to prevent spillage and environmental contamination from handling, storage and processing of materials. Control measures must be commensurate with risks to the environment, and ensure that environmental impacts due to spills or other releases are minimised. For those cases where site contamination has occurred, the intent of the standard is to ensure that contamination is properly characterised, managed and remediated where necessary.
E6 Noise and vibration control	The intent of this standard is to ensure that Rio Tinto operations minimise their noise and vibrations impacts on the surrounding environment and communities. This includes impacts on biota, people, heritage aspects and surrounding land use. Control is to be accomplished by identifying noise and vibration sources, evaluating and prioritising the sources according to significance of potential impacts then taking effective measures to design and implement appropriate controls.
E7 Non-mineral waste management	The intent of this standard is to ensure sound non-mineral waste management in Rio Tinto operations by the minimisation of waste generation and ensuring the safe handling, treatment and disposal of all generated wastes.
E8 Mineral waste management	The intent of this standard is to ensure environmentally sound and effective management of mining and process wastes generated or handled by Rio Tinto operations. Waste disposal facilities and sites must be physically, biologically and chemically safe. Waste production and disturbed footprint shall be minimised and waste re-use, in-pit backfill, progressive rehabilitation and recycling maximised.
E9 Land use stewardship	The intent of this standard is to develop management plans, programmes and procedures to ensure sustainable stewardship of the land that Rio Tinto owns, leases or manages. This requires an

Environmental standard	Objective
	understanding of the current use and value of the land combined with its potential to fulfil corporate, community and other stakeholders' expectations for beneficial land uses that can be supported and sustained in the future.
E10 Water use and quality control	The intent of this standard is to ensure efficient, safe and sustainable management and protection of water resources and ecosystems in and around Rio Tinto operations. This requires an understanding of the water resources, their spatial and temporal interrelationships, their ownership in the region and the needs of catchment stakeholders. This provides the basis for the development of an integrated and strategic approach to water management including social, environmental, operational and economic aspects.

Source: Rio Tinto 2010

In relation with its Water use and quality control standard, Rio Tinto has also developed its own Water Strategy on water management. The commitments are:

- Continuously improve the efficiency with which we use water.
- Prevent, wherever possible, and otherwise minimise, adverse impacts on water quality and water quantity.
- Account for the social, environmental and economic value of water in business planning, projects, operation and closure.
- Identify and respect cultural values associated with water.
- Engage water users, including communities, governments, industry, in the sustainable use of water resources.

4.9.2.3 Occupational Health Standards

Every Rio Tinto business and site must have Occupational Health (OH) standards (either separate or integral with safety and/or environment), consistent with the Rio Tinto statement of business practice, "The Way We Work", and the Occupational Health policy and strategy documents..

There are also 11 Health performance standards applicable to all Rio Tinto business units and managed operations, including new acquisitions, administration/corporate offices and research facilities located off site; during exploration, through all development phases and construction, operation to closure and, where applicable, for post closure management. It applies only to noise exposures in the workplace. These standards are summarised in Table 4.11; they can also be found on Rio Tinto's website (Rio Tinto 2010).

In addition, a specific guideline was issued on malaria prevention to protect workers present in the Simandou area. Malaria remains a high health risk for the Project, especially in the Simandou area. A protocol has been developed to ensure a maximum of protection for Rio Tinto workers, its consultants and contractors.

Table 4.11 Rio Tinto corporate Occupational health performance standards

Health standard	Overview
B1 Particulate and gas/vapour exposures	This standard applies to dust, fibres, mist and fume (ie particulates), and gas and vapour exposures in the workplace, with emphasis on inhalation as the prime route of exposure. It covers particulate and gas/vapour hazard evaluation, control programme design and control programme evaluation (medical surveillance), to ensure that employees and contractors will not suffer adverse health effects from particulates or gas/vapours, either used or generated by the Business.
B2 Hearing conservation	This standard covers noise hazard evaluation, control programme design and control programme evaluation (audiometric surveillance), to ensure that employees and contractors will not suffer adverse health effects from noise generated by the business.
B3 Manual handling and vibration	This standard focuses on musculo-skeletal damage that can result from manual handling and from vibration. It covers musculo-skeletal hazard evaluation, control programme design and control programme evaluation, to ensure that employees and contractors will not suffer adverse health effects from poor task and equipment design, or from inappropriate behavioural practices.
B4 Hazardous substances	This standard applies to dangerous goods and hazardous substances, both process and non-process. It covers hazard identification and evaluation, control programme design and evaluation, to ensure that employees, contractors and third parties will not suffer adverse health or safety effects from hazardous substances that are transferred, used or generated by the business, and to ensure the minimisation of risks and environmental impacts due to spill or other releases of hazardous substances. Local definitions of dangerous goods and hazardous substances in regulations should be adhered to by businesses.
B5 Radiation	This standard applies to workplace radiation issues and includes both ionising and non-ionising radiation. It covers radiation hazard evaluation, programme design, exposure controls and employee education and training, to ensure that employees, contractors and third parties will not suffer adverse health effects from radiation sources.
B6 Thermal stress	This standard addresses both workplace heat stress and cold stress. It covers high temperature conditions generated by the industrial process or the mining environment, temperatures exacerbated by hot weather, and extreme cold weather conditions, that can pose a risk to health and safety of employees and contractors.
B7 Fitness for work	This standard applies where a risk assessment has identified that fatigue or other causes of impaired fitness for work could produce a potential for serious injury, illness or death, significant equipment/plant damage, or significant environmental impact. It covers programme design, management of shift systems, and personal fitness. 'Personal fitness' includes the person's physical, mental and emotional state.
B8 Legionnaires disease	This standard applies to Legionnaires disease in the workplace. It covers Legionella hazard evaluation, control programme design and control programme evaluation, to ensure that employees, contractors

Health standard	Overview
	and third parties will not suffer adverse health effects.
B9 Travel and remote site health	This standard covers the general travel health issues associated with temporary site visits, health issues associated with working in remote areas or at operations that supply food and water, and altitude sickness. It covers travel health programme design and management, to ensure that employees, contractors and third parties will not suffer adverse health effects.
B10 Occupational exposure limits	This standard is meant to protect all who work at Rio Tinto operations from occupational illness, workplace hazardous exposures must be controlled to below occupational exposure limit (OEL) and/or biological test limit values. The lists of substances (or agents) are derived from an assessment of business unit exposures, but do not necessarily include all hazardous exposures found within the Rio Tinto Group.
B11 HIV/Aids	This standard applies to all operations, including projects, in which the community prevalence of HIV is at one per cent or greater (as defined by UNAIDS), or in lower prevalence areas where the presence of HIV/AIDS poses a significant business risk, for example due to the threat to employee health, company reputation or business sustainability. It covers risk assessment, programme design and evaluation to ensure the effective management of the significant risks that HIV poses to workers, their dependents and the communities in which we operate.

Source: Rio Tinto 2010

4.9.2.4 Safety Standards

Among Rio Tinto's corporate Safety standards, nine are related to Operations standards, two of which relate to specialised operations, to which every Rio Tinto business must comply in terms of safety. The targeted objectives for each of these standards are summarised in Table 4.12.

Table 4.12 Rio Tinto corporate Safety performance standards

Safety standard	Overview – Operations standards
C1 Isolation	This standard defines the requirements in terms of responsibility and procedure (use of lock) whenever a piece of plant or equipment is to be isolated.
C2 Electrical safety	This standard lists the requirements in terms of competency standards and safe work procedures applicable to all electrical work above 110 V DC or 50 V AC.
C3 Vehicles and driving	This standard applies to all vehicles, including mobile mining equipment, owned and operated by Rio Tinto or its contractors, which are used on Rio Tinto operations or off-site for Rio Tinto business purposes. It defines the requirements in terms of risk analysis of vehicles, training and licensing, traffic rules, tire and rim safety.
C4 Working at heights	This standard applies to any task where the risk assessment highlights a danger of falling. In any case, fall prevention or protection measures shall be used for elevated work above 1.8 m.

C5 Confined spaces	This standard provides guidance for entry or work in confined spaces and requires a permitting process that includes a risk assessment and the implementation of procedures to follow for entering a confined space.
C6 Cranes and lifting equipment	This standard applies to all cranes, including vehicle-mounted cranes, equipment used as cranes, hoists and lifting equipment such as elevated work platforms (EWP) and rigging equipment. It sets out the requirements for a documented process and procedures related to planning of lift plans, operation of cranes, maintenance, inspection and training.
C7 Aviation safety	This standard covers aviation activities throughout Rio Tinto, including the use of aircraft by Rio Tinto employees, contractors and visitors and applies to both charter operations and commercial airline travel.
Safety standard	Overview – Specialised operations
D1 Underground standards	This standard applies to all underground mines at existing operations and new acquisitions as well as at all shafts including those developed for exploration or mine construction purposes. Each underground operation must establish a Ground control management plan, emergency procedures, fire precautions, and hoisting procedures.
D2 Molten materials	This standard applies to all activities and equipment involving molten materials, including molten metals, slag, matte, electrolyte (bath) and liquid pitch.

Source: Rio Tinto 2010

4.9.2.5 Closure Standard

Rio Tinto has also a Closure standard to ensure that managed activities are left in a condition which minimises adverse impacts on the human and natural environment, and that a legacy remains which makes a positive contribution to sustainable development. This standard seeks to influence the design, development, operation and closure of all Rio Tinto managed operations so as to ensure the optimisation of post closure outcomes in terms of social, environmental and economic development needs and expectations.

Projects are required to adopt and comply with as many of the clauses in the Closure standard as are required to ensure withdrawal from a project or study in a manner that meets the intent of the standard.

4.9.3 Biodiversity Strategy

Rio Tinto's Biodiversity Strategy (2004) recognises the importance of conservation and responsible management of biodiversity and wants its operations to have a Net Positive Impact (NPI) on biodiversity. As a first principle, Rio Tinto aims to develop programmes that achieve the following two main objectives:

- To reduce the footprint of its mining operations as much as possible so that habitat and species conservation are affected as little as possible; and

- To help local communities maintain and enhance their traditional cultural values, particularly those relating to biodiversity.

The principles adopted in the Rio Tinto's Biodiversity Strategy to meet these objectives are:

- To prevent and minimise, through mitigation measures, the risks for and impacts on biodiversity throughout the duration of the operations;
- To ensure responsible stewardship of the land in which the operations are being conducted;
- To identify and pursue biodiversity conservation opportunities; and
- To involve local communities and other organisations in management of biodiversity issues.

Rio Tinto's Biodiversity strategy provides a framework to bring together the interests and concerns of several groups, including indigenous landowners, affected communities, investors, employees, NGOs, regulators, scientific and finance communities. The active and equitable involvement of these groups in decision-making is fundamental to the success of Rio Tinto's biodiversity initiatives.

4.9.4 Product Stewardship Strategy

Rio Tinto recognises the need to better understand the impacts and benefits of its products across their life cycles. This has resulted in the development of Rio Tinto Product Stewardship Strategy (Rio Tinto 2010).

Rio Tinto's goal is to be recognised as a leader in the industry on product stewardship issues, thus reflecting its commitment to sustainable development, differentiating its products and commercial reputation, protecting its markets and thereby delivering value to the business and society at large.

The following four objectives provide a strategic approach for the implementation of the strategy:

- Integrate product stewardship into business systems.
- Secure market access and competitive advantage.
- Develop and communicate product safety, health and environment data.
- Engage with customers and stakeholders to create opportunities and enhance reputation.

As part of its commitment, Rio Tinto also recognises that the effective stewardship of products across the value chains, from resource extraction to product recycle or disposal is crucial. Rio Tinto believes that its products contribute to sustainable development by contributing to sustainable communities, sustainable markets and sustainable stock of goods that can be used and recycled for centuries to come.

Further, Rio Tinto is committed to managing its processes and products in a responsible manner that balances environmental, social, and economic values for the benefit of society at large.

4.10 IFC POLICIES, STANDARDS AND GUIDELINES

The IFC has developed its own policies, performance standards and guidelines to ensure that social and environmental issues are integrated in the planning and implementation stages so that projects that they finance are socially and environmentally sound and sustainable.

4.10.1 Policies and Performance Standards

The IFC framework for assessing the social and environmental aspects of a project is governed by:

- A Policy on Social and Environmental Sustainability (IFC 2006b), which defines the roles and responsibilities of the IFC when supporting projects in partnership with clients.
- A Policy on Disclosure of Information (IFC 2009b), which defines the disclosure policies for diffusion of information by the institution.
- Environmental and Social Review Procedure (IFC 2009c), used as an IFC guideline for applying Social and Environmental Sustainability policies and for assessing the compliance of projects completed by the private sector.
- Performance Standards on Social and Environmental Sustainability (IFC 2006a), defining the roles and responsibilities of the IFC's private-sector partners as well as necessary requirements for obtaining and maintaining the IFC's support. IFC applies the Performance Standards (PS) to manage social and environmental risks and impacts. Eight PS establish standards that the client is to meet throughout the life of an investment by IFC. Table 4.13 summarise these eight PS that are supported by Guidance Notes (IFC 2010) providing additional information on IFC expectations.

The Policy on Social and Environmental Sustainability and the supporting Performance Standards are currently in the process of being reviewed and updated. It is estimated that this process will conclude in December 2010.

In addition to its policies, performance standards and guidelines, IFC also uses the following Good Practice Manuals:

- Good Practice Note on Hazardous Materials Transportation Plan;
- Good Practice Manual on Hazardous Materials Risk Management Plan;
- Stakeholder Engagement: A Good Practice Handbook for Companies doing Business in Emerging Markets;
- Investing in People: Sustaining Communities through Improved Business Practice;
- Handbook for Preparing a Resettlement Action Plan; and,

- Good Practice Note: Addressing the Social Dimensions of Private Sector Projects.

Table 4.13 IFC Social and Environmental Sustainability Performance Standards

Standard	Summary
Performance Standard 1	Social and Environmental Assessment and Management System A social and environmental management system must be applied throughout the life of the project. An effective management system is a dynamic, continuous process involving communication between all parties. The system must allow for the continuous evaluation of the project's social and environmental performance.
Performance Standard 2	Labour and Working Conditions This standard aims to establish the best possible worker-management relationship by respecting both national and international labour conventions and laws, by promoting fair treatment, equal opportunity, non-discrimination, and by promoting safe and healthy working conditions.
Performance Standard 3	Pollution Prevention and Abatement This standard outlines a project approach to pollution prevention and abatement by conforming to internationally accepted technologies and practices. It aims to avoid or reduce negative impacts of pollution on human health and the environment by preventing and abating the pollution generated by project construction and operation, and by promoting the reduction of greenhouse gas emissions.
Performance Standard 4	Community Health, Safety and Security This standard addresses the responsibility of the project proponent throughout the life of the project to avoid or reduce the risks and potential impacts associated with project activities on personnel and property, in such a manner that avoids and minimises risks to community health, safety and security.
Performance Standard 5	Land Acquisition and Involuntary Resettlement This standard aims to prevent involuntary resettlement and land acquisition from impoverishing the affected persons and from causing social tensions or environmental damage. The standard establishes policies for resettlement of people, mitigating the consequent negative social and environmental impacts, improving standards of living of those displaced, and reinstating their livelihood.
Performance Standard 6	Biodiversity Conservation and Sustainable Natural Resource Management This standard recognises that "biodiversity conservation - the variety of life in all its forms, including genetic, species and ecosystem diversity and its ability to adapt, is fundamental to sustainable development." The proponent thus has the responsibility to reduce and avoid impacts on biodiversity, to protect and conserve biodiversity, and to promote the sustainable use and management of natural resources.
Performance Standard 7	Indigenous Peoples Indigenous Peoples, as distinct and vulnerable social groups, are often prevented from participating in development and are exposed to different levels of risk and impacts. The standard aims to establish the methods necessary to ensuring that the Project respects these peoples, and to avoid affecting them negatively, while preserving their social, cultural and linguistic uniqueness.

Standard	Summary
Performance Standard 8	Cultural Heritage In recognising the importance of cultural heritage, this standard establishes the policies for its protection from the adverse impacts of project activities, and for ensuring and maintaining its conservation.

Source: International Finance Corporation 2006a

4.10.2 Environmental Health and Safety Guidelines

The Environmental Health and Safety (EHS) guidelines (IFC 2010) are technical reference documents providing relevant industry background and technical information. This information supports actions aimed at avoiding, minimising, and controlling EHS impacts during the construction, operation and decommissioning phases of a project or facility. For complex projects such as Simandou, use of multiple industry-sector guidelines is necessary. The relevant EHS guidelines applicable to the project are the following:

- EHS General Guidelines;
- EHS Guidelines for Mining;
- EHS Guidelines for Ports, Harbors and Terminals;
- EHS Guidelines for Railways;
- EHS Guidelines for Thermal Power Plants.

The IFC industry-sector EHS guidelines contain performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Each guideline provides a summary of EHS issues or impacts associated with the sector, recommendations on their management, a definition of effluent and emission guidelines as well as guidance on the monitoring programmes to be implemented during the operations. The applicability of these guidelines can be tailored to the hazards and risks for a project on the basis of a site environmental assessment in which site specific variables such as host country context, assimilative capacity of the environment and other project factors are taken into account.

The IFC EHS General guidelines (IFC 2010) recommend discharge criteria applicable to any industry sector and project (e.g. ambient air, noise, etc.) and describe effective management principles of EHS issues and impacts for aspects such as air emissions and ambient air quality, energy conservation, wastewater and ambient water quality, water conservation, hazardous materials management, noise, contaminated land and environmental monitoring. Requirements for community and occupational health and safety issues are detailed in the EHS general and the industry-sector guidelines.

4.11 ENVIRONMENTAL DISCHARGE CRITERIA

The Republic of Guinea has no standard for discharges to the environment (e.g. solid waste, liquid effluents, or atmospheric emissions) or on the quality of the environment (e.g. ambient air quality, objectives for water quality or ambient noise). Government

officials indicated that such standards are in preparation, but there is no draft document available for the moment.

In the absence of Guinean environmental or discharge standards, Rio Tinto will use IFC guidelines for the Simandou Project or site-specific criteria to be developed during the engineering phase, taking into account host country context, assimilative capacity of the environment and other project factors. In the absence of IFC guidelines for a specific sector, Rio Tinto will compare its results with international standards or criteria from well established and recognised organisations such as the World Health Organization (WHO), or standards from South Africa, Australia, Europe, United States and Canada.

GLOSSARY

Acid Rock Drainage	Refers to the outflow of acidic water from metal or coal mines, as a consequence of the oxidation of iron-sulphur minerals (pyrite and pyrrhotite) catalyzed by a bacteria (Thiobacillus ferrooxidans).
Affected community	Local communities that are subject to risks or impacts from a project (IFC 2006a).
Associated facilities	A major portion of the living environment of a particular region characterized by its distinctive vegetation and maintained by local climatic conditions (IUCN 2009).
Baseline data	Data gathered during the social and environmental assessment used to describe the relevant existing conditions of the project, such as physical, biological, socio-economic, and labour conditions, including any changes before the project commences (IFC 2006a).
Biodiversity action plan	Process which assess how the proposed activities affect biodiversity and renewable natural resources, determine how biodiversity and renewable resources can be managed as part of the client's activities and how adverse impacts can be mitigated and identifies responsibilities (internally and externally) and resources for management and mitigation (IFC 2006a).
Biodiversity	Integrating concept that includes the ecosystems within which the people of the world live, as well as the multitude of species that are used by humankind for food, fibre, medicines, clothing and shelter. Biodiversity is the variety of life in all its forms, including genetic, species and ecosystem diversity (IFC 2006).
Blend stockpiles	Contain crusher feed material that has elevated Al_2O_3 , SiO_2 or P levels. In general these materials cannot be fed directly into the crushers but need to be blended with higher grade Haematite.
Compensation framework	Establishes the procedures for determining and awarding compensation. The compensation framework 1) identifies all affected people; 2) provides inventory of affected assets; 3) describes the methods applied for valuing land and other affected assets at full replacement cost; 4) indicates the rates of compensation to be paid; 5) outlines a schedule of land take and compensation payments; and 6) describes the process whereby affected people can appeal property valuations they deem to be inadequate (IFC 2006a).

Cultural heritage	A unique and non-renewable resources that processes cultural, scientific, spiritual or religious value and includes moveable or immovable objects, sites structures, groups of structures, natural features, or landscapes that have archaeological, historical, cultural, artistic, and religious values, as well as unique natural environmental features that embody cultural values, such a sacred groves (IFC 2006a).
Deposit	A body of rock containing valuable minerals; usage generally restricted to zones of mineralisation whose size has been wholly or partially determined through sampling.
Dewatering	To remove water from (a waste product or open pit mine, for example).
Effluent	Wastewater – treated or untreated – that flows out of a treatment plants, sewer, or industrial outfall; generally refers to wastes discharged into surface waters (IFC 2006a).
Greenhouse gases	The six greenhouse gases that form the Kyoto Protocol to the United Nations Framework Convention on Climate Change: Carbon dioxide (CO ₂), Methane (CH ₄), Nitrous oxide (N ₂ O), Hydro fluorocarbons (HFCs); Perfluorocarbons (PFCs), Sulfur hexafluoride (SF ₆) (IFC 2006a).
Hazardous substances	Substances that possess at least one of four characteristics – ignitability, corrosivity, reactivity, or toxicity – or appear on special list (IFC 2006a).
Hematite	Brown to reddish brown or red iron oxide mineral. Varieties include kidney ore, martite, iron rose and specularite. Goethite is another iron oxide-hydroxides mineral. Hematite is harder than pure iron, but much more brittle. Large deposits of hematite are encountered in banded iron formations. They are mined as the main ore of iron in Simandou.
Landscape	A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given area (IUCN 2009).
Low grade stockpile	Contain material that does not presently meet product specifications, but may in the future become a viable source of crusher feed if a processing plant is commissioned.

Mineralisation	In the course of the formation of ore bodies in rocks, deposition of economically important metals, resulting in a valuable or potentially valuable deposit.
Mining concession	A grant of land or property especially by a government in return for services or for a particular use.
Natural resources	Resources produced by nature, commonly subdivided into non-renewable resources, such as minerals and fossil fuels, and renewable natural resources that propagate or sustain life and are naturally self-renewing when properly managed, including plants and animals, as well as soil and water (IUCN 2009).
Occupational health and safety	Refers to the range of endeavours aimed at protecting workers from injury or illness associated with exposure to hazards encountered in the workplace or while working (IFC 2006a).
Project's area of influence	The projects' area of influence includes the primary project site(s) and related facilities that the client (including its contractors) develops or controls; associated facilities that are not funded as part of the project (funding may be provided separately by a client or a third party including the government), and whose viability and existence depend exclusively on the project and whose goods or services are essential for the successful operation of the project; areas potentially impacted by cumulative impacts from further planned development of the project; and areas potentially affected by impacts from unplanned but predictable developments caused by the project that may occur later or at a different location. The area of influence does not include potential impacts that would occur without the project or independently of the project (IFC 2006a).
Resettlement action plan	The document in which a project sponsor or the responsible entity specifies the procedures that it will follow and the actions that it will take to mitigate adverse effects, compensate losses, and provide development benefits to persons and communities affected by an investment project (IFC 2006a).
Taxon	A formal taxonomic unit or category at any level in a classification (family, genus, species, etc.) (plural: taxa) (IUCN 2009).

ACRONYMS AND ABBREVIATIONS

ACRONYMS

AC	Alternating Current
ACP-EU	African, Caribbean and Pacific Group of States-European Union
AFD	Agence Française du Développement (French Development Agency)
ARD	Acid Rock Drainage
BCA	Baseline Communities Assessments
CEDAW	Convention on the Elimination of all Forms of Discrimination against Women
CEGENS	Centre de Gestion de l'Environnement des Monts Nimba et Simandou (Mount Nimba and Simandou Environmental Management Centre)
CF	Classified Forest
CFZ	Centre Forestier de N'Zérékoré (N'Zérékoré Forestry Centre)
CI	Conservation International
CIA	Commission Interne d'Approbation (Internal Review Board)
CITES	Convention on International Trade in Endangered Species (of Wild Fauna and Flora)
CNSHB	Centre National des Sciences Halieutiques de Boussoura (Boussoura National Centre on Halieutic Sciences)
CS	Conceptual Study
DC	Direct Current
DNH	Direction Nationale de l'Hydraulique
DNPN	Direction Nationale de la Protection de la Nature (National Branch for the Protection of Nature)
DUP	Déclaration d'Utilité Publique (Decree of Public Interest)
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EMS	Environmental Management System
EU	European Union

EWP	Elevated Work Platforms
FFI	Fauna & Flora International
FS	Feasibility Study
GHG	Greenhouse Gas
GIS	Geographic Information System
GoG	Government of Guinea
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
HME	Heavy Mobile Equipment
HSEC	Health, Safety, Environmental and Community
HSEQ	Health, Safety, Environmental and Quality
IC	Investment Committee
ICMM	International Council on Metals and Minerals
ICSID	International Center for Settlement of Investment Disputes
IDA	International Development Association
IFC	International Finance Corporation
ILO	International Labour Organization
IRD	Institut de Recherche pour le Développement (Research Institute for Development) ex. ORSTOM
LSA	Local Study Area
MCIPME	Ministère du Commerce, de l'Industrie et des Petites et Moyennes Entreprises (Ministry of Commerce, Industry and Small and Medium Enterprises)
MENV	Ministry of Environment
NGO	Non-Governmental Organisation
NPI	Net Positive Impact
OEL	Occupational Exposure Limit
OH	Occupational Health
OHBLA	Organization for the Harmonisation of Business Law in Africa
OoM	Order of Magnitude Study
PAN/LCD	Programme d'Action National de Lutte Contre la Désertification (National Action Plan against Desertification)
PAP	Project Affected People

PCDS	Public Consultation and Disclosure Strategy
PdF CF	Pic de Fon Classified Forest
PFS	Pre-Feasibility Study
PIN	Projet d'Intérêt National (Project of National Interest)
PNAE	Plan National d'Actions pour l'Environnement (National Action Plan for the Environment)
PRSP	Poverty Reduction Strategy Papers
PS	Performance Standard
RAP	Rapid Assessment Program
RSA	Regional Study Area
S.A.	Société Anonyme (Anonymous Society)
SEBS	Social and Environmental Baseline Study
SEIA	Social and Environmental Impact Assessment
SLE	SNC-Lavalin Inc., Environment Division
SME	Small and Medium Entreprises
SMFG	Société des Mines de Fer de Guinée (Iron Mining Society of Guinea)
SNEEE	Service National des Études et Évaluations Environnementales (National Environmental Assessment Study Service)
ToR	Terms of Reference
TT	Target Testing
UK	United Kingdom
UN	United Nations
USA	United States of America
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organisation
WMC	Water Management Consultants (now Schlumberger Water Services Ltd.)
WTO	World Trade Organization

ABBREVIATIONS

%	percent
e.g.	for example
i.e.	that is
inc.	incorporated
km	kilometre
km ²	square kilometre
Mt	Megaton
Mtpa	Million tons per annum
MW	Megawatt
n.a.	not applicable
no.	number
V	voltage
vs.	versus

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APPENDIX A

Baseline Study Team

Appendix A-1 – Rio Tinto team

Name	Role/Title
John Merry	Environment and Community General Manager
Leon Payne	Environment Manager
Catherine Garcia	Communities Manager
Judith Schorscher	Communities Specialist
Mario Gauthier	Environment Approvals and Natural Resources Manager
Daniel Eason	Environmental Specialist

Appendix A-2 – SNC-Lavalin Environment baseline study team

Topic	Name	Role/Title	Country
Project management	Richard Fontaine	Project Manager	Canada
	Robert Auger	Former Project Manager	Canada
Socio-economics	Susan Novak	Socio-economist	Canada
	France Séguin	Socio-economist	Canada
	Julie Forget	Socio-economist	Canada
	Caroline-Anne Perreault	Socio-economist	Canada
	Brigitte Ditner	Sociologist	Europe
	Fodé Mamadou Camara	Sociologist	Guinea
	Dantily Diakité	Sociologist	Guinea
	Amadou Diallo	Sociologist	Guinea
	Maïmouna Diallo	Sociologist	Guinea
	Mady Diawando	Sociologist	Guinea
	Mohamed Lamine Dioubaté	Sociologist	Guinea
	David Niéréké Niabalamou	Sociologist	Guinea
	Massa Guilavogui	Sociologist	Guinea
	Abdoulaye Ibrahima Touré	Sociologist	Guinea
	Augustin Sakouvogui	Sociologist	Guinea
Cultural heritage	Djibril Tamsir Niane	Historian	Guinea
Legal framework	Monya Pelchat	Environmental Analyst	Canada
Climate	Eric Delisle	Meteorologist	Canada
Air quality and noise	Claude Chamberland	Noise Engineer	Canada
	Alexandre Couture	Technicien (air quality and noise)	Canada
Geology,	Martin Stapinsky	Hydrogeologist	Canada

Topic	Name	Role/Title	Country
hydrology and hydrogeology	Charly Cadou	Hydrologist	Canada
	Marc Deschamps	Geographer	Canada
	Renaud Lemoine	Physics Engineer	Canada
Biodiversity	Chantal Roy	Biodiversity Specialist – Country Manager	Canada
	Dominique Auger	Biologist – On-site Coordinator	Canada
	Véronique Tuffeli	Biologist	Canada
Large mammal	Janis Carter	Primatologist	Gambia
	Tim Wachter	Conservation Programs Zoological Society of London	United Kingdom
	Mory Kourouma	Mammal Specialist	Guinea
	Alhassane Barry	Mammal Specialist	Guinea
	Philippe Haba	Mammal Specialist	Guinea
	Mamadou Keita	Mammal Specialist	Guinea
Small mammal	Jan Decher	Department of Biology University of Vermont	United States
	Blaise Kadjo	Cocody University	Côte d'Ivoire
	Ryan Norris	University of Vermont	United States
	Anke Hoffmann	Humboldt-Universität zu Berlin Museum für Naturkunde	Germany
	Juliane Schaer	Humboldt-University zu Berlin	Germany
Bird	Ron Demey	Ornithologist	Netherlands
	Balla Moussa Condé	Ornithologist Guinée Écologie	Guinea
	Kadiatou Soumah	Ornithologist Guinée Écologie	Guinea
	Mamadi Camara	Ornithologist Guinée Écologie	Guinea
Amphibian and reptile	Christian Brede	University of Würzburg, Experimentelle Stammzell	Germany
	Annika Hillers	Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam	Netherlands
	Mohamed Alhassane Bangoura	Programme de conservation de la biodiversité des Monts Nimba	Guinea
	Joseph Doumbouya	Centre d'Etude et de Recherche en Environnement (CERE), Université de Conakry	Guinea
	Eli Kpogomou	Centre de Gestion de l'Environnement des Monts Nimba et Simandou (CEGENS)	Guinea

Topic	Name	Role/Title	Country
	Kaman Camara	Herpetofauna Specialist	Guinea
	Bernard Doré	Programme de conservation de la biodiversité des Monts Nimba	Guinea
	Gaspard Théa	Herpetofauna Specialist	Guinea
Freshwater fish	Philippe A. Lalèyè	Faculty of Agriculture Sciences University of Abomey-Calavi	Benin
	Mambi Magassouba	Centre National des Sciences Halieutiques de Boussoura (CNSHB)	Guinea
	Sékou Camara	Centre National des Sciences Halieutiques de Boussoura (CNSHB)	Guinea
Use of natural resources	Watta Camara	N'Zérékoré Forestry Centre	Guinea
	Salim Kouyaté	N'Zérékoré Forestry Centre	Guinea
GIS specialists	Christian Laliberté	Geographer - GIS Manager	Canada
	Mélanie Dupré	Geographer - GIS Specialist	Canada
	Christian Laroche,	Geographer - GIS Specialist	Canada
	Laurence Bathalon	GIS Technician	Canada
	René Aubut	Geographer - GIS Specialist	Canada
On-site logistics/ coordination	Guy Poirier	Logistician	Canada
	Jean-François Poirier	Mine site coordinator	Canada
	Alexandre Ménard	Mine site coordinator	Canada
SEBS completion	Diane Langlois	Editor	Canada
	Caroline LePage	Reviewer	Canada
	Claudia Paz Miller	Edition	Canada

Appendix A-3 – Rio Tinto consultants involved in the baseline study

Topic	Name/Company	Company/Expertise	Country
Socio-economics	Cabinet AMERA	Environmental and socio-economic expertise	Guinea
	La Granada Enterprises Inc.	Social sustainable development	Europe
Climate	UK Met Office	Meteorologists	United Kingdom
Geology, hydrology and hydrogeology	Water Management Consultants (now Schlumberger Water Services (SWS))	Development, management, and environmental protection of water resources	United Kingdom
Biodiversity	Jonathon Ekstrom	The Biodiversity Consultancy	United Kingdom
Flora	Martin Cheek	Royal Botanic Gardens, Kew	United Kingdom
	Susana Baena	Royal Botanic Gardens, Kew	United Kingdom
	Yvette Harvey	Royal Botanic Gardens, Kew	United Kingdom
	Xander van der Burgt	Royal Botanic Gardens, Kew	United Kingdom
	Charlotte Couch	Royal Botanic Gardens, Kew	United Kingdom
	Laura Pearce	Royal Botanic Gardens, Kew	United Kingdom
	Iain Darbyshire	Royal Botanic Gardens, Kew	United Kingdom
	Sharon Laws	Royal Botanic Gardens, Kew	United Kingdom
	Barthelemy Tchiengue	Herbier National Camerounais	Cameroon
	Gaston Achoundong	Herbier National Camerounais	Cameroon
	Martin Etuge	Conservation Research on Endangered Species (CRES)	Cameroon
	Elias Ndive	Limbe Botanic Garden,	Cameroon
	Jean-Louis Holié	N'Zérékoré Forestry Center	Guinea
	Nicolas Delamou	N'Zérékoré Forestry Centre	Guinea
	Thomas Williams	Rio Tinto Environment	Guinea

Topic	Name/Company	Company/Expertise	Country
		Department	
	Seydou Cissé	Rio Tinto Environment Department	Guinea
	Alphonse Traoré	Guinée Écologie	Guinea
	Fatoumata Fofana	Guinée Écologie	Guinea
	Pépé Haba	Guinée Écologie	Guinea
	Pierre Haba	Guinée Écologie	Guinea
	Boubacar Diallo	Herbier de Sérédou	Guinea

Table of Conformance to Terms of Reference

Appendix B – Table of conformance to Terms of Reference

Terms of reference	Baseline study volume and section
PROJECT FRAMEWORK	
Project introduction and history	Vol. A/ Chap. 1
Description of the project	Vol. A/ Chap. 2
Definition of study areas	
Define the Project's areas of influence (Impacted zones). Develop criteria for the inclusion (or exclusion) of the population to be affected by the Project.	Vol. A/ Sec. 3.3.3 Vol. B/ Chap. 2 Vol. C/ Chap. 2 Vol. D/ Chap. 2
Definition of Populations and Households Potentially Affected by the Project	Vol. B/ Sec. 2.2
Social and environmental legal framework	
Identify the social and environmental legal and institutional framework applicable to the Simandou Project, including host country and international laws.	Vol. A/ Chap. 4
Review the existing legal register and describe the legal context regulating mine operation.	Vol. A/ Sec. 4.1
Review Guinean legal framework, Rio Tinto's policies and IFC Performance Standards.	Vol. A/ Chap. 4
Review the process of issuance of notices and compliance certificates, in both the construction and operation phases.	Vol. A/ Sec. 4.6
SOCIAL BASELINE	
Historical and cultural resources	
Provide a description of the current cultural context in the areas of influence of the Project.	Vol. B/ Chap. 4
Explain the social and economic context of local and regional communities.	Vol. B/ Sec. 4.1
Analyse the social organisation of all ethnic groups in the Project affected area to understand: - The traditional authority structure and the relationship of this to the local authority. - The social village and household organisation. - The gender concept including the distribution of all domestic, productive, commercial, educational, and cultural tasks in the households.	Vol. B/ Sec. 4.2 Sec. 4.3 Sec. 6.6
Investigate the probability of archaeological or cultural sites, which could not be removed for the Project's construction. Interview Guinean Specialists (historians, university professors, etc.), local authorities and traditional chiefs.	Vol. B/ Sec. 4.4.1.5
Investigate the culture, traditions, and values, which could be positive or negative points in the context of the Project. How do the local people react to change, are they flexible or strongly attached to their traditions, houses, or land? Are they individualistic or do they share, and pool their resources? What is most important for them to improve their lives?	Vol. B/ Sec. 4.4
Local governance	
Identify stakeholders who may have an interest in the Project or who may affect (or	Vol. B/

Terms of reference	Baseline study volume and section
be affected by) the Project at local (including individuals, households, groups or local communities), national and international levels, and refine the existing stakeholder group.	Sec. 5.4 Sec. 5.5
Public consultation and information	
Review consultation activities undertaken for the Project, read records of previous engagements in the Simandou Project, record actions agreed and taken, actions refused, and set up a consultation schedule for on-going interaction with key stakeholders.	Vol. B/ Sec. 3.3.1 Sec. 3.3.3
Socio-demographic profile	
Provide a description of the current socio-economic context in the areas of influence of the Project, as the pre-Project reference point (called “situation zero”).	Vol. B/ Chap. 6
Update population data as well as the annual growth rates estimates using various sources of information, if reasonably accurate and reliable.	Vol. B/ Sec. 6.6.1
Analyze, for the previous decades, the population changes due to in or out migrations.	Vol. B/ Sec. 6.1.4
Conduct an on-going influx study leading to the establishment of the in-migration plan that will manage the flux of migrants in the study area. Integrated the data collected in the SEBS.	Vol. B/ Sec. 6.1.4
Survey the total number of villages affected by the Project.	Vol. B/ Sec. 3.3, Sec. 6.1
Study the main population characteristics: ethnic groups, religion, demographic rates, morbidity, health description of local communities, literacy level, level of education, types of households, level of livelihood.	Vol. B/ Chap. 6
Pay attention to the circumstances of women and children, their status, rights (inheritance) traditional and modern laws, access to properties (land, capital), their decision-making power and place in society, their level of information and of education, their health status and their needs.	Vol. B/ Sec. 6.6
Establish the list of existing health centres (hospitals, clinics, dispensaries, first help centres, maternities, village medicines deposits) within or in close proximity to the Project affected area.	Vol. B/ Sec.6.3
Visit a representative sample of the health facilities to assess their level of equipment, functioning, frequentation, and their needs.	Vol. B/ Sec. 3.3, Sec. 6.3
Study the extent to which the local population has access to these centres and use them (as opposed to visiting traditional healers).	Vol. B/ Sec. 6.3.3
Obtain from local health staff statistics on main diseases and list likely basic needs for the next 20 years (needs affordable to the population). Supplement this with information obtained from household questionnaire surveys of affected communities.	Vol. B/ Sec. 6.3
Assess the extent and nature of vulnerable groups	Vol. B/ Sec. 6.5
Study the existing settlement pattern, road network, water supply, irrigation facilities and schemes, electricity supply systems and any sanitation facilities in the Prefectures and villages concerned, and if necessary, the future needs of local and inter-regional infrastructure.	Vol. B/ Sec. 4.3 Sec. 6.3
Land use, land tenure and development	
Develop a land-use mapping including land ownership and resource-use mapping.	Vol. B/ Sec. 8.1
Identify land use types in the directly Project affected area, first through interpretation of satellite images and field observations, then in more detail through	Vol. B/ Sec. 8.1

Terms of reference	Baseline study volume and section
village and household field surveys.	
Analyse, where necessary, the existing situation of urban areas, needs and potentialities, using secondary available data, interviews and sample surveys if necessary.	Vol. B/ Sec. 8.3
Document the traditional and modern land-use rights, systems of land values and access to land in the different areas. Document the existence of any Agrarian Reform program and level of implementation.	Vol. B/ Chap. 7
Document the current pressure on arable or pastoral land, land rights conflicts, and all legal aspects.	Vol. B/ Chap. 7 Vol. A/ Sec. 4.2.4
For each homogeneous area potentially affected (directly or indirect), document the land pressure, cost of access to land, and availability of land in case of land acquisition by the Project.	Vol. B/ Chap. 7 Chap. 8
Livelihoods systems	
Estimate the implications for local populations and the state in respect of their level of livelihood activities, resources, extent of constraints, poverty and potential and opportunities for development associated with the Project.	Vol. B/ Sec. 9.1.1
Document the cropping patterns, typology of farms and farmers, and cattle owners and breeders.	Vol. B/ Sec. 9.2
Conduct a study in the Project area (using all secondary data available) on the agricultural and pastoral potentialities of the areas.	Vol. B/ Sec. 9.3
Identify and map market places.	Vol. B/ Sec. 9.5
Conduct field socio-economic surveys at regional and village levels and household level to describe the current economic situation.	Vol. B/ Chap. 9
Visual Land Use	
Identify and describe the landscape/infrastructure units for the study area.	Vol. B/ Sec. 8.2
Use the topographic model produced by the Lidar Survey for a visual study, and produce a series of professional images from key vantage points to assess the visual aspects of the Simandou range.	Vol. B/ Sec. 8.2
Social issues and indicators	
Define socio-economic indicators for monitoring the Environmental and Social Action Plan (ESAP), Land Acquisition, Resettlement and Compensation Framework (LARCF) and Regional Development Linkages Plan (RDLP) which will be implemented during the life of the Project.	Vol. B/ Chap. 10
PHYSICAL BASELINE	
Climate	
Describe the weather conditions within the study area by analysing data collected at existing weather stations. Including a description of temperatures, precipitation, humidity levels, evaporation rates, wind conditions, visibility and fog conditions, extreme climatologically phenomena, etc.	Vol. C/ Sec. 4.3.2
Integrate the results of on-going climate modeling of the orographic effects associated with topographical features, undertaken by a meteorological specialist (in order to gain a better understanding of precipitation mechanisms).	Vol. C/ Sec. 4.2.3 Sec. 4.3.2.7
Assess the existing meteorological stations network in the PdF CF in order to determine if a more extensive network is required, especially on the western side of the Simandou range. If deemed necessary, install additional meteorological stations as early as possible in the development of the SEBS work.	Vol. C/ Sec. 4.2.2

Terms of reference	Baseline study volume and section
Air quality	
Install air quality monitoring stations at two sampling sites for the mine area and monitor SO ₂ , NO _x , particulate matter (e.g. from bushfires), and any other relevant parameters over a one-year period.	Vol. C/ Sec.5.2
Describe air quality and compare concentration levels to international standards.	Vol. C/ Sec. 5.3
Identify the main factors affecting ambient air quality.	Vol. C/ Sec. 5.1
Noise climate	
Measure the current sound climate in the mine area, at villages and hamlets located near the installations, and in sectors that have sensitive receptors in order to establish the background noise.	Vol. C/ Sec. 6.3
Measure the equivalent continuous noise level (L _{Aeq,T}) which represents the average noise level during the day and at night and the background noise (L _{AF95}) that is exceeded 95% of the time during the day and at night.	Vol. C/ Sec. 6.3
Identify main sources of noise (e.g. as insects and birds chirping, thunder, rainfall, and human activities).	Vol. C/ Sec. 6.3
Geology, geomorphology, topography and soils	
Briefly describe the main regional relief features (topography, geology, geomorphology, etc.) and conditions more specific to the infrastructure sites.	Vol. C/ Chap. 3, Chap. 7
Specify, base on existing information, the geological context of the area, and its distinguishing characteristics.	Vol. C/ Chap. 7
Describe the various types of surface deposits found in the study zone according to their spatial distribution.	Vol. C/ Chap. 8
Based on existing maps and reports, highlight and locate the geomorphologic characteristics of the territory under study, such as zones sensitive to erosion, lateritic zones, zones that are easily flooded, etc.	Vol. C/ Chap. 12
At the sites of new installations, analyse the nature and quality of the soil/sediment (presence of heavy metals, hydrocarbons, erodible soils, and soils subject to excessive shrinkage and expansion, etc.)	Vol. C/ Chap. 8
Describe the geotechnical conditions of the ground and the seismic risks.	Vol. C/ Chap. 12
Assess identification of arable and non-arable areas at broad level.	Vol. C/ Chap. 8
Carry out acid generation and neutralization potential tests on core samples taken from the ore and the waste material.	Vol. C/ Chap. 7
Hydrology and hydrogeology	
Describe hydrogeologic conditions (aquifers, stratigraphic context, hydraulic gradient, direction of flow, average and maximum heights of groundwater as compared to the soil at implementation sites, etc.) based on the data and information contained in existing and available studies.	Vol. C/ Sec. 10.3
Combine and analyse the available existing surface and underground water quality data in order to characterize the water reference state in the Simandou area before mining activities.	Vol. C/ Sec. 10.3.4, Sec. 9.3.4, Sec. 9.3.5
Carry out additional analyses in strategic locations (sites for drawing water, or its use, by the communities).	Vol. B/ Sec. 6.3.1
Compare surface and underground water quality data with international standards.	Vol. B/ Sec. 6.3.1.4 Vol. C/ Sec. 11.3

Terms of reference	Baseline study volume and section
BIODIVERSITY BASELINE	
Vegetation and flora	
Summarise previous inventories (RBG Kew, Winrock, RAP, CFZ) and integrate the results into the baseline study.	Vol. D/ Sec. 6.3
Identify and map the distribution of rare, threatened or endemic species (provided on IUCN and <i>Monographie Nationale</i> lists) or having restricted geographical distribution.	Vol. D/ Sec. 12.6
Describe and map the various vegetation characteristic of the study zone, using recent satellite images and existing studies (detailed habitat map produced by the Royal Botanical Gardens, Kew).	Vol. D/ Chap. 5
Describe the dominant species in each formation (dominant species and abundance index).	Vol. D/ Sec. 5.3
Discuss the level of degradation of the forest resources.	Vol. D/ Sec. 5.3 Vol. D/ Chap. 14
Undertake detailed surveys for distribution and density of species of interest (rare/threatened/endemic) at sites contemplated for mining operations. Continue and broaden in scope surveys to include potentially rich locations such as primary forests, sensitive habitats or endangered species.	Vol. D/ Chap. 6
Complete the basic maps of plant species with special reference to rare (particularly endemic) or endangered species.	Vol. D/ Sec. 12.6
Fauna	
Carry out more detailed complementary surveys in the PdF CF, including potentially rich locations (such as primary forests), rare/threatened/endemic species (e.g. primates, especially chimpanzees), organisms not covered by the preliminary studies (e.g. fish, or organisms to be further investigated, such as birds, amphibians and reptiles).	Vol. A/ Chap. 7 Chap. 11
Use of transect methodology to cover all types of habitats.	Vol. A/ Sec. 7.2
Map animal species (distribution and density), with special reference to threatened, rare or vulnerable species (found on IUCN, CITES and <i>Monographie Nationale</i> lists), or endemic species.	Vol. D/ Sec. 12.6
Describe the current pressures on the fauna species as a result of human activities.	Vol. D/ Chap. 14
Protected areas	
Define the exact legal status (both written and implicit) and conservation significance of the PdF CF, in comparison to other protected areas in the vicinity of the Project.	Vol. A/ Sec. 4.3.4 Vol. D/ Sec. 3.3.1
Describe the actual management plan for the PdF CF in term of zoning, authorized or prohibited uses in each zone, development or actions planned in the short, medium and long-term to foster maintenance and restoration of endangered resources, management procedures for the various zones and their surveillance.	Vol. D/ Sec. 3.3.1
Natural habitats and biodiversity	
Compare sensitivity of the PdF CF to other regional classified forests followed by a more detailed GIS biodiversity mapping of the PdF CF including essential, sensitive and critical habitats	Vol. D/ Chap. 13 Critical Habitat Assessment include in TBC 2010

Terms of reference	Baseline study volume and section
Use of natural resources	
Perform a survey about the contribution of the traditional medicine.	Vol. B/ Sec. 9.3 Vol. D/ Sec. 12.5.1.1
Conduct socio-economic study on the use of natural resources from the PdF CF. Document the species used by local populations and the degree of disturbance of the forests.	Vol. B/ Chap. 9 Vol. D/ Sec. 12.5
Consult concerned communities to further the knowledge bank of species utilisation by the local communities (e.g. medicine, food, fodder, cultural activities) and activities (crops, planting, wood cutting, gathering, etc.) in the PdF CF.	Vol. B/ Sec. 4.4, Chap. 8, Chap. 9 Vol. D/ Sec. 12.5
KEY ISSUES, RISKS AND CHALLENGE FOR THE PROJECT	
Identify the Project's major social, environmental and economic issues, constraints and opportunities, in addition to the interest and main concerns of the various parties affected.	Vol. B/ Sec. 10.3, Sec. 10.4 Vol. E/ Conclusion (Sec. 1.2)

Source: SNC-Lavalin Environment 2008, Terms of Reference for the Social and Environmental Baseline Study, Simandou Project.

Table of Conformance to IFC Performance Standards

Appendix C – Table of Conformance to IFC Performance Standard

Performance Standard (April 2006)	Baseline study volume and section
<i>Note: Most Performance Standard articles refer typically to the impact assessment or management plan phases. Only articles relevant to the baseline study and applicable to the Simandou Project have been considered.</i>	
Performance Standard 1: Social and Environmental Assessment and Management System	
4. The Assessment process will be based on current information, including an accurate project description, and appropriate social and environmental baseline data. Applicable laws and regulations of the jurisdictions in which the project operates that pertain to social and environmental matters, including those laws implementing host country obligations under international law, will also be taken into account.	Vol. A/ Chap.2 Vol. A/ Chap. 4
5. The project's area of influence encompass, as appropriate: (i) the primary project site(s) and related facilities that the client (including its contractors) develops or controls , such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, construction camps; (ii) associated facilities that are not funded as part of the project (funding may be provided separately by the client or by third parties including the government), and whose viability and existence depend exclusively on the project and whose goods or services are essential for the successful operation of the project; (iii) areas potentially impacted by cumulative impacts from further planned development of the project, any existing project or condition, and other project-related developments that are realistically defined at the time the Social and Environmental Assessment is undertaken; and (iv) areas potentially affected by impacts from unplanned but predictable developments caused by the project that may occur later or at a different location. The area of influence does not include potential impacts that would occur without the project or independently of the project.	Vol. A/ Sec. 3.3.3 Vol. B/ Chap. 2 Vol. C/ Chap. 2 Vol. D/ Chap. 2
12. As part of the Assessment, the client will identify individuals and groups that may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status.	Vol. B/ Sec. 6.5
15. The program will define desired outcomes as measurable events to the extent possible, with elements such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.	Vol. B/ Chap.10
19. Community engagement is an on-going process involving the client's disclosure of information. When local communities may be affected by risks or adverse impacts from a project, the engagement process will include consultation with them. The purpose of community engagement is to build and maintain over time a constructive relationship with these communities. The nature and frequency of community engagement will reflect the project's risks to and adverse impacts on the affected communities. Community engagement will be free of external manipulation, interference, or coercion, and intimidation, and conducted on the basis of timely, relevant, understandable and accessible information.	Vol. B/ Sec. 3.3.2 , Sec. 3.3.3

Performance Standard (April 2006)	Baseline study volume and section
Performance Standard 2: Labor and Working Conditions	
6. The client will adopt a human resources policy appropriate to its size and workforce that sets out its approach to managing employees consistent with the requirements of this Performance Standard. Under the policy, the client will provide employees with information regarding their rights under national labor and employment law, including their rights related to wages and benefits. This policy will be clear and understandable to employees and will be explained or made accessible to each employee upon taking employment.	Vol. A/ Sec. 4.2
10. In either case described in paragraph 9, and where national law is silent, the client will not discourage workers from forming or joining workers' organizations of their choosing or from bargaining collectively, and will not discriminate or retaliate against workers who participate, or seek to participate, in such organizations and bargain collectively. Clients will engage with such worker representatives. Worker organizations are expected to fairly represent the workers in the workforce.	Vol. A/ Sec. 4.2
11. The client will not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The client will base the employment relationship on the principle of equal opportunity and fair treatment, and will not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where national law provides for non-discrimination in employment, the client will comply with national law. When national laws are silent on non-discrimination in employment, the client will meet this Performance Standard. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job will not be deemed discrimination.	Vol. A/ Sec. 4.2
14. The client will not employ children in a manner that is economically exploitative, or is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where national laws have provisions for the employment of minors, the client will follow those laws applicable to the client. Children below the age of 18 years will not be employed in dangerous work.	Vol. A/ Sec. 4.2
15. The client will not employ forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.	Vol. A/ Sec. 4.2
16. The client will provide the workers with a safe and healthy work environment, taking into account inherent risks in its particular sector and specific classes of hazards in the client's work areas, including physical, chemical, biological, and radiological hazards. The client will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, so far as reasonably practicable, the causes of hazards. In a manner consistent with good international industry practice, ³ the client will address areas, including: the identification of potential hazards to workers, particularly those that may be life-threatening; provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; training of workers; documentation and reporting of occupational accidents, diseases, and incidents; and emergency prevention, preparedness and response arrangements.	Vol. A/ Sec. 4.1.2

Performance Standard (April 2006)	Baseline study volume and section
Performance Standard 3: Pollution Prevention and Abatement	
3. During the design, construction, operation and decommissioning of the project (the project lifecycle) the client will consider ambient conditions and apply pollution prevention and control technologies and practices (techniques) that are best suited to avoid or, where avoidance is not feasible, minimize or reduce adverse impacts on human health and the environment while remaining technically and financially feasible and cost-effective. The project-specific pollution prevention and control techniques applied during the project life-cycle will be tailored to the hazards and risks associated with project emissions and consistent with good international industry practice, as reflected in various internationally recognized sources, including IFC's Environmental, Health and Safety Guidelines (the EHS Guidelines).	Vol. A/ Sec. 4.9, Sec. 4.10
5. The client will avoid or minimize the generation of hazardous and non-hazardous waste materials as far as practicable. Where waste generation cannot be avoided but has been minimized, the client will recover and reuse waste; where waste can not be recovered or reused; the client will treat, destroy, and dispose of it in an environmentally sound manner. If the generated waste is considered hazardous, the client will explore commercially reasonable alternatives for its environmentally sound disposal considering the limitations applicable to its transboundary movement. When waste disposal is conducted by third parties, the client will use contractors that are reputable and legitimate enterprises licensed by the relevant regulatory agencies.	Vol. A/ Sec. 4.9.2.2
7. The client will be prepared to respond to process upset, accidental, and emergency situations in a manner appropriate to the operational risks and the need to prevent their potential negative consequences. This preparation will include a plan that addresses the training, resources, responsibilities, communication, procedures, and other aspects required to effectively respond to emergencies associated with project hazards. Additional requirements on emergency preparedness and response are found in paragraph 12 of Performance Standard 4.	Vol. A/ Sec. 4.9.2.4
8. The client will refer to the current version of the EHS Guidelines when evaluating and selecting pollution prevention and control techniques for the project. These Guidelines contain the performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from the levels and measures presented in the EHS Guidelines, clients will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the client will provide full and detailed justification for any proposed alternatives. This justification will demonstrate that the choice for any alternate performance levels is consistent with the overall requirements of this Performance Standard.	Vol. A/ Sec. 4.9, Sec. 4.10
10. The client will promote the reduction of project-related greenhouse gas (GHG) emissions in a manner appropriate to the nature and scale of project operations and impacts.	Vol. A/ Sec. 4.9.2.2
15. The client will not use products that fall in World Health Organization Recommended Classification of Pesticides by Hazard Classes Ia (extremely hazardous) and Ib (highly hazardous); or Class II (moderately hazardous), if the project host country lacks restrictions on distribution and use of these chemicals, or if they are likely to be accessible to personnel without proper training, equipment, and facilities to handle, store, apply, and dispose of these products properly.	Vol. A/ Sec. 4.9.2.3

Performance Standard (April 2006)	Baseline study volume and section
Performance Standard 4: Community Health, Safety and Security	
7. The client will prevent or minimize the potential for community exposure to hazardous materials that may be released by the project. Where there is a potential for the community (including workers and their families) to be exposed to hazards, particularly those that may be life-threatening, the client will exercise special care to avoid or minimize their exposure by modifying, substituting or eliminating the condition or substance causing the hazards. Where hazardous materials are part of existing project infrastructure or components, the client will exercise special care when conducting decommissioning activities in order to prevent exposure to the community. In addition, the client will exercise commercially reasonable efforts to control the safety of deliveries of raw materials and of transportation and disposal of wastes, and will implement measures to avoid or control community exposure to pesticides in accordance with the requirements outlined in paragraphs 6 and 12 through 15 of Performance Standard 3	Vol. A/ Sec.4.2 Vol. B/ Sec. 6.3
10. The client will prevent or minimize the potential for community exposure to water-borne, water based, water-related, vector-borne disease, and other communicable diseases that could result from project activities. Where specific diseases are endemic in communities in the project area of influence, the client is encouraged to explore opportunities during the project life cycle to improve environmental conditions that could help reduce their incidence.	Vol. A/ Sec. 4.9.1
11. The client will prevent or minimize transmission of communicable diseases that may be associated with the influx of temporary or permanent project labor.	Vol. A/ Sec. 4.9.1
Performance Standard 5: Land Acquisition and Involuntary Resettlement	
8. When displacement cannot be avoided, the client will offer displaced persons and communities' compensation for loss of assets at full replacement cost and other assistance to help them improve or at least restore their standards of living or livelihoods, as provided in this Performance Standard. Standards for compensation will be transparent and consistent within the project. Where livelihoods of displaced persons are land-based, or where land is collectively owned, the client will offer landbased compensation, where feasible. The client will provide opportunities to displaced persons and communities to derive appropriate development benefits from the project.	Vol. A./ Sec. 4.5
14. Displaced persons may be classified as persons: (i) who have formal legal rights to the land they occupy; (ii) who do not have formal legal rights to land, but have a claim to land that is recognized or recognizable under the national laws; or (iii) who have no recognizable legal right or claim to the land they occupy. The census will establish the status of the displaced persons.	Vol. B/ Chap. 7
19. Where communities of Indigenous Peoples are to be physically displaced from their communally held traditional or customary lands under use, the client will meet the applicable requirements of this Performance Standard, as well as those of Performance Standard 7 (in particular paragraph 14).	Vol. B/ Sec. 4.2.3
20. If land acquisition for the project causes loss of income or livelihood, regardless of whether or not the affected people are physically displaced, the client will meet the following requirements:	Vol. A./ Sec. 4.5

Performance Standard (April 2006)	Baseline study volume and section
• Promptly compensate economically displaced persons for loss of assets or access to assets at full replacement cost. • In cases where land acquisition affects commercial structures, compensate the affected business owner for the cost of re-establishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstallation of the plant, machinery or other equipment. • Provide replacement property (e.g., agricultural or commercial sites) of equal or greater value, or cash compensation at full replacement cost where appropriate, to persons with legal rights or claims to land which are recognized or recognizable under the national laws (see paragraph 14 (i) and (ii)). • Compensate economically displaced persons who are without legally recognizable claims to land (see paragraph 14 (iii)) for lost assets (such as crops, irrigation infrastructure and other improvements made to the land) other than land, at full replacement cost. The client is not required to compensate or assist opportunistic settlers who encroach on the project area after the cut-off date. • Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their income-earning capacity, production levels, and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected. • Provide transitional support to economically displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.	
Performance Standard 6: Biodiversity Conservation and Sustainable natural Resource Management	
4. The Assessment will take into account the differing values attached to biodiversity by specific stakeholders, as well as identify impacts on ecosystem services. The Assessment will focus on the major threats to biodiversity, which include habitat destruction and invasive alien species.	Vol. D/ Chap. 12
5. Habitat destruction is recognized as the major threat to the maintenance of biodiversity. Habitats can be divided into natural habitats (which are land and water areas where the biological communities are formed largely by native plant and animal species, and where human activity has not essentially modified the area's primary ecological functions) and modified habitats (where there has been apparent alteration of the natural habitat, often with the introduction of alien species of plants and animals, such as agricultural areas). Both types of habitat can support important biodiversity at all levels, including endemic or threatened species.	Vol. D/ Sec. 5.3.2
9. Critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value ³ , including habitat required for the survival of critically endangered or endangered species ; areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or which are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic or cultural importance to local communities.	Critical Habitat Assessment include in TBC 2010
12. Intentional or accidental introduction of alien, or non-native, species of flora and fauna into areas where they are not normally found can be a significant threat to biodiversity, since some alien species can become invasive, spreading rapidly and out-competing native species	Vol. D/ Sec. 6.3.1.5

Performance Standard (April 2006)	Baseline study volume and section
15. In particular, forests and aquatic systems are principal providers of natural resources, and need to be managed as specified below.	Vol. D/ Sec. 12.5
Performance Standard 7: Indigenous Peoples	
7. The client will identify through a process of Social and Environmental Assessment all communities of Indigenous Peoples who may be affected by the project within the project's area of influence, as well as the nature and degree of the expected social, cultural (including cultural heritage ¹), and environmental impacts on them, and avoid adverse impacts whenever feasible.	Vol. B/ Sec. 4.2.3
12. Indigenous Peoples are often closely tied to their traditional or customary lands and natural resources on these lands. While these lands may not be under legal ownership pursuant to national law, use of these lands, including seasonal or cyclical use, by communities of Indigenous Peoples for their livelihoods, or cultural, ceremonial, or spiritual purposes that define their identity and community, can often be substantiated and documented.	Vol. B/ Sec. 4.2 Sec. 7.2
13. If the client proposes to locate the project on, or commercially develop natural resources located within, traditional or customary lands under use, and adverse impacts can be expected on the livelihoods, or cultural, ceremonial, or spiritual use that define the identity and community of the Indigenous Peoples, the client will respect their use by taking the following steps: - The client will document its efforts to avoid or at least minimize the size of land proposed for the project. - The Indigenous Peoples' land use will be documented by experts in collaboration with the affected communities of Indigenous Peoples without prejudicing any Indigenous Peoples' land claim.	Vol. B/ Sec. 4.4
Performance Standard 8: Cultural Heritage	
4. In addition to complying with relevant national law on the protection of cultural heritage, including national law implementing the host country's obligations under the Convention Concerning the Protection of the World Cultural and Natural Heritage and other relevant international law, the client will protect and support cultural heritage by undertaking internationally recognized practices for the protection, field-based study, and documentation of cultural heritage.	Vol. B/ Sec.4.4
6. Where a project may affect cultural heritage, the client will consult with affected communities within the host country who use, or have used within living memory, the cultural heritage for longstanding cultural purposes to identify cultural heritage of importance, and to incorporate into the client's decision-making process the views of the affected communities on such cultural heritage. Consultation will also involve the relevant national or local regulatory agencies that are entrusted with the protection of cultural heritage.	Vol. D/ Sec. 12.5.1.2

Source: IFC, 2006a. Performance Standards on Social and Environmental Sustainability.

Social Legal and Policy Texts

Appendix D - Social legal and policy texts

The Land Code, as with similar legislation in neighbouring countries, makes little explicit mention of the rights of occupants who are not registered as land title holders (informal or customary). However, Article 39 seems to guarantee the rights of bona fide occupants (i.e. customary owners) to be eligible for compensation for developments in the event of expropriation.

D1. Poverty Reduction Strategy Papers

The Poverty Reduction Strategy Papers (PRSP) describe the policies and programmes that the country intends to implement in the macroeconomic, structural and social plans to promote growth and reduce poverty. It also describes the needs for external funding needed to implement these policies and programmes. These papers are prepared by the Government, under the auspices of the World Bank and the International Monetary Fund (IMF) using a participatory process which involves civil society representatives and development partners. They represent an extensive development plan that influences the policy, and possibly the country's legal framework and regulations.

It presents a coherent results-based strategic framework based on three major areas of intervention: i) improving governance and strengthening institutional and human capacities; ii) improving economic growth and expanding job opportunities, and iii) improving access to quality social services.

In terms of improving economic growth, the two main objectives are economic stability first and then increased domestic production through the creation of sustainable jobs that have an impact on the poorest. To achieve these objectives, the country must remove all the constraints to private sector development regarded as the main driver of economic growth. The constraints identified in the PRSP include: i) an administrative and legal environment that in theory is quite significant, but which is stifling for private investment initiatives; ii) a lack of public service ethics favorable to the promotion of the private sector; iii) weak production infrastructures (roads, water, electricity, telecommunications, etc.) and accompanying structures such as chambers of commerce, body of employers, and public institutions; iv) a financial system that is structurally inappropriate and insufficient; v) limited access to information and a lack of dialogue between government, private sector and civil society; and vi) the need to better articulate State budget to the priorities of the PRSP.

D2. Urban Code

The Urban Code (Law L98/N°017/1998) sets the national rules applying to planning and urban development, authorizations and actions relating to land use, land transaction and development. The general rules applicable to land use, for other purposes than agricultural production, are determined by the *Règlement national d'urbanisme (RNU)* or National Urbanism By-law.

According to the Urban Code, the State is responsible for the management and development of the national territory. It is also the sole body permitted to regulate the occupation and land use in such national lands. The Civil Code and the Domain and Land Tenure Code are the fundamentals of the soil status and the related rights, that is, the same provisions apply to expropriation and compensation.

Regarding role-sharing between the State and an industrial developer, the Code specifies the procedures for participation in the financing of public facilities. Thus, when the facilities are needed only for the industrial project in question, the responsibility lies solely with the industrial developer.

Such participation may result in sales of free land, connection to the sewage network and the financing of exceptional public facilities.

Even before the acquisition of land by an industrial developer, the State and municipalities may, after consideration, establish a preemptive right on all or part of urban and future urbanizing areas covered by a management plan. This right is open to the municipality and its municipal council may decide to abolish it and restore it again.

D3. Collectivities Code

The Collectivities Code explains the powers and responsibilities of local collectivities and is part of the decentralization process of the administrative power in Guinea. Represented either by an Urban Commune or a Rural Development Community, they are conferred legal personality and the power to self-administer, under the supervision of the State, through elected authorities. Each local collectivity is made up of all the citizens who reside in its territory. They are freely administered by elected councils that govern on their behalf, through decisions resulting from their deliberations, the affairs of the local community. They assist the State in land use administration and planning, economic and social development, health, culture and science, and environmental protection and in the improvement of the quality of life. These communities are responsible for informing and involving the population concerned by their administrative power.

One of the key responsibilities of the collectivities is the management of land use planning. In fact, local communities share with the State the responsibility of land use management and planning, in the terms and limits provided for by law.

One of these important powers is to enable these collectivities to establish land reserves in anticipation of planned developments mentioned in urbanism documents, or zoning and development plans implemented in their territory. These land reserves are constituted by means of acquisition, pre-emption or expropriation for public utility. The land reserves of a local collectivity are part of the public estate until they are used. Therefore it is assumed that when an estate located on the territory is being made available, local collectivities have a preemptive right which, when exercised, gives them priority over any other purchaser.

D4. National Agricultural Development Policy

The objectives of the National Agricultural Development Policy (NADP) are part of the national terms of reference laid down in the National Poverty Reduction Strategy Papers (PRSP) and in the Millennium Development Goals (MDGs). More specifically, the objectives of this policy are to increase agricultural production and productivity and ensure sustainable use of natural resources and the environment. The NADP is based on principles of consistency with the PRSP and the MDGs, economic efficiency, social equity and sustainability, with the decentralization policy and the ECOWAS policy, and the African Union's New Partnership for Africa's Development (NEPAD). This policy is based on the dynamics of private investment, production and on seeking productivity in agriculture. The Government would like an impact in food security improvement, environmental protection and in a progressive improvement of the balance of payments.

D5. Labour Code

The following table is a summary of the main articles of the Labour Code.

Table D. 5.1 Main Articles of the Labour Code

Volumes and Titles	Articles
Volume I: Employment	
Title I: Work contract	Article 5: Minimum age of 16 years to conclude a work contract (or an apprenticeship/training contract). If a minor (<18 years), the approval of the superior to whom he/she responds is required.
	Article 6: The employer must transfer all offers of employment to the National Employment and Labour Bureau except for seasonal workers hired for a period of 15 days or less.
	Article 7: In order to hire a foreign worker, prior authorization is required from the National Employment and Labour Bureau, and the hiring is administered by a specific regulation.
	Article 13: A contract shall not be considered fixed duration if for longer than two years, over which it will be considered to be of undetermined duration.
	Article 14: In the case of fixed-duration work, the contract must always be in writing, otherwise it is considered to be of undetermined duration.
Sub-contracting	Article 23: The sub-entrepreneur is he/she who enters into a fixed contract, necessarily in writing, with the entrepreneur. The sub-entrepreneur must be accredited and included in the company's register.
	Article 24: In the case of insolvency of the sub-entrepreneur, the entrepreneur is his/her substitute for his/her obligations to the workers when work is done in workshops, shops or the entrepreneur's field. If the work is performed in another location, the entrepreneur is responsible for paying the workers' salaries.
	Article 26: The entrepreneur must submit an example of every contract signed with a sub-entrepreneur to the work inspector.
Title II: Apprenticeship	Article 28: The apprenticeship contract is subject to the requirements of Article 5 (but according to Article 31, the apprentice must be at least 14 years of age). The contract must be confirmed in writing.

Volumes and Titles	Articles
	Article 43: The employer must participate in the state training and apprenticeship programme and pay the apprenticeship tax (amount of tax undetermined).
Title III: Professional training	Article 44: The provider of continuing education must declare his/her existence, objectives and means to the Directory of the National Office of Training and Professional Development.
Title IV: Suspension of right to work	Article 50: Work is suspended if the worker legitimately refuses to work or if the employer refrains from providing work. Suspension of work applies in the following cases: Illnesses and accidents (Articles 54 to 58); Maternity leave (Articles 59 to 65); Military duty (Articles 66 to 67).
Title V: Modification to work contract	Article 68: The employer may only impose minor changes to the working conditions specified at the time of hiring.
Title VI: Termination of work contract	Article 71: At the end of the determinate-length work contract, the employer must pay compensation equal to 5% of the total salary paid and must remit a certificate of work to the employee.
Volume II: Working conditions	This Volume addresses work conditions and defines the duration of work and vacation as well as regulation of hygiene and safety at work. Aspects covered: obligations of the employers concerning general protection and cleanliness measures; training of workers on prevention; role of the work inspectors; labeling and use of hazardous substances; protection of machines; ventilation of dangerous work areas; special conditions applicable to construction operations; status of occupational medicine status and functions; penalties in case of non-respect of these regulations.
Title I: Internal regulation	Article 118: The development of internal regulation is required in all companies and establishments regularly employing at least 25 salaried employees.
	Article 119: The internal regulation is a written document that the employer uses to fix general rules relatively to discipline as well as the procedural regulations guaranteeing the rights of defense and the rules of hygiene and safety applicable to the establishment.
Title II: Duration of work and holidays	Article 139: Regular week: 40h/week. Part time: Less than 40h/week. Overtime applicable if more than 40h/week (except certain categories, see Order N° 1391/MASE/DNTLS/90 at the end of the table).
	Article 143-144: Right to 100 hours of overtime per year. For over 100 hours, the authorization of the work inspector is required. A wage increase of 30% (first 4 hours) and of 60% must be paid to the employee.
	Article 145: The length of time worked must not exceed 10 hours per day or 48 hours per week.
	Article 146-147: A wage increase of 20% for nighttime work (between 20h et 6h).
	Article 148: Nighttime work not permitted for women (of all ages) and youth younger than 18 yrs (see also Order 1392).
	Article 152: Weekly rest mandatory. Minimum 24 consecutive hours.
	Article 159: Wage increase of 60% on holidays (100% lat night).
	Article 160: Annual paid vacation 2.5 days per month.
Title III: Protection of workers' health	Article 169: The employer must follow all useful measures to protect the health and safety of its employees.
	Article 172: All heads of establishments must organise practical training in safety and hygiene.

Volumes and Titles	Articles
	Article 186: The minister of Labour determines, via Orders, all work that must not be performed by women, apprentices and workers under 18 years of age (Order 1392).
	Article 191: The hygiene and safety plan must be communicated to the work inspector before work begins.
	Article 193: All employment candidates must undergo a medical examination at the expense of the entrepreneur, who must also ensure an annual medical follow-up of his/her employees.
	Article 199: For companies of 500+ workers: Continuous operation of a doctor and nurse for up to 1000 workers. One extra nurse per additional 500 employees. When fewer than 1000 employees, there must be a medical clinic less than 25 km away. Between 100 and 499 workers: periodic visits by a doctor and continuous operation of a nurse. Between 20 and 99 workers: periodic visits by a doctor. Fewer than 20 workers: installation of first aid kits and possibly inter-company medical services.
Title IV: Salaries	Article 206: The employer must ensure the right to equal pay for work of equal value regardless of the origin, sex and age of the worker.
	Article 210: A salary for task work must be at least equal to the salary of a worker paid hourly.
	Article 211: All employees have the right to a guaranteed minimum wage (that should be determined by decree, which has not yet been developed).
	Article 215: Paying of wages occurs at regular intervals and, at minimum, every two weeks.
	Article 217: The payment of salary must be confirmed by a certified document from the employer. These documents must be presented at the request of the work inspector.
Volume III: Representation of social partners	Patronage Unions (see articles 237 to 247).
	Unions and union representation within the company (see articles 248 to 287).
	Consultative Work Commission and social laws (see articles 288 to 293).
Volume IV: Collective Conventions and Conflicts	Negotiation and application of collective agreements (see articles 294 to 337). Collective conflicts (see articles 328 to 351).
Volume V: Administration and Labour Jurisdiction Title I: Labour Administration	Article 357: The work inspector controls the application of legislation and regulation related to remuneration, working conditions, hygiene, safety, collective negotiation and union rights within the company.
Title II: Labour Jurisdiction (see articles 374 to 405)	Article 374: Some individuals are subject to Labour Inspection, and some directly to the Labour Tribunal, depending on their regulation.

Volumes and Titles	Articles
Implementing Provisions	
Order N° 1386/MASE/DNTLS/90	Employment categories in the private sector and similar sectors: Worker: 2nd category (non-skilled worker) to 7th category B (highly qualified worker). Employee: 1st category (common labourer) to 7th category (qualified employee having received an advanced professional education and much experience such as an accountant or other). Manager: 1st category (supervisory staff managing a maximum of 20 employees) to 5th category (senior agent who manages personnel and has extended responsibility by order of the director).
Order N° 1387/MASE/DNTLS /90	Termination pay: Fixes the minimum amount of compensation due to an employee due to a dismissal in consideration of his/her pay (hourly, monthly). The law dictates that an employee shall receive, as a minimum per year of service, 25% of a month's salary.
Order N° 1389/MASE/DNTLS/90	Holidays List of the 11 holidays. These days are not worked, and paid by the employer.
Order N° 1391/MASE/DNTLS/90	Applicable daily schedule variable according to the profession For certain employees, the 40h workweek can be surpassed: Chauffeur for transportation of personnel: 48 hours. Security guards and janitors: 55 hours.
Order N° 1392/MASE/DNTLS/90	Of female labour and pregnant women - Women may not work at any kind of job between 8 pm and 6 am. - Mandatory rest of 12 consecutive hours. - May not be prescribed to carry certain loads. - May not occupy jobs in areas designed to certain work (handling of dangerous materials, etc.) - Are not permitted to work for 6 weeks before giving birth, nor for 8 weeks after. - Right to a non-paid vacation of 9 months for salaried pregnant women.

D6. Animal Husbandry and Products Code

The Animal Husbandry and Products Code includes all provisions relating to livestock, their products and, in general, to veterinary public health. The Code addresses the following points:

- Issues of ownership and civil liability in the event of injury or damage caused by animals;
- Improvement of livestock production and livestock feeding;
- Livestock circulation and transhumance, grazing and watering problems; on this specific point, the Code refers to the Pastoral Code;

- Domestic and international trade of animals and animal products in their health particularities;
- Monitoring of animal health and control of animal diseases transmissible to humans or detrimental to the country's economy;
- Privatisation and organisation of the veterinary profession;
- Preservation of the natural environment of animals, which seeks harmony between extensive animal husbandry and wildlife environment;
- Hygiene, control and health and quality inspection of animal products animals, especially when they are intended for human or animal consumption;
- The protection of animals against cruelty and abuse.

The Code also encourages the creation of farmer groups and notes that they are subject to the Code and all legislations governing the Farmer Associative Movement.

Environmental Legislation

Appendix E - Environmental Legislation

E1. Harmonisation of the Mining Code and the Forest Code

The purpose of the harmonisation of the Mining Code with the Forest Code (Order 654) is to ensure mutual consultation between the Mines Minister and the Forestry Minister before mining or logging licenses are established or issued.

Thus, the establishment or issuance of a mining title for all areas subject to a regulated agro-pastoral or logging license is subject to a favourable decision by the Forestry Minister, following an inter-ministerial consultation. The Forestry Minister has a period of 60 days to respond after information on the feasibility study has been submitted. Failure to do so will result in the mining title being granted to the applicant by the Mines Minister.

Similarly, when a logging license applies to an area already subject to a mining concession, the Forestry Minister must consult the Mines Minister in order to obtain his approval.

Articles 2 and 3 of Order 624 state that land, tree and shrub clearing activities and timber cutting activities that are essential to the operation of a concession must be authorized by the Forestry Minister. If there is no response within 60 days after the request has been submitted, the Mines Minister may grant authorization. This authorization issued to carry out these works also covers cutting off and clearing activities under the Forest Code.

E2. Guinean Law on Continental Fishing Organisation

The law aims to preserve continental aquatic environments and protect continental halieutic resources.

The continental waters include all fresh water resources, including rivers, streams, canals, and the water retaining reservoirs they communicate with. They also include mortlakes, ponds, flooded areas, natural or artificial water reserves. With regard to sea tributary rivers, there are provisions of the Guinean Law on Continental Fishing Organisation (Law L/96/007/AN) that apply upstream of the saltiness limit.

The State owns the right to fish in inland waters. This right may be transferred in return for payment or free of charge to individuals or legal entities. Professional fishing may be performed by a license holder.

Under the law, the introduction of species or eggs of exotic fish in Guinea to re-stock inland waters with fish life or introduce young species into inland waters is forbidden, unless a prior written authorization of the Minister of inland fisheries and the Minister in charge of aquaculture.

Finally, the use of any fishing gear or of any method likely to affect the habitat of the species is prohibited.

E3. Decree Regulating the Management and Control of Noxious and Hazardous Chemicals in Guinea

The decree (D/97/287/PRC/SGG) regulating the management and control of noxious and hazardous chemicals in Guinea provides a list of noxious and hazardous substances, the measures relating to the management of these substances as well as the financial provisions which oblige any producer, importer and user of such substances to pay the tax on chemicals and/or hazardous products.

E4. Law on Arms, Ammunition, Gunpowder and Explosives

The Law on Arms, Ammunition, Gunpowder and Explosives (Law L/96/008) applies to the production, importation, exportation, use, transportation and storage of explosive powders and substances. These activities (civilian use) are controlled by the Interior Ministry and are subject to authorization granted by a joint Order of the Interior Minister and the Commerce and Industry Minister.

Investment Policy Text

Appendix F - Investment Policy Text

Investment Code – Advantages related to privileged regimes

	SME Regime	Exporting Enterprise Regime	Regime for enterprises developing natural resources	Enterprises established in less developed areas
Criteria	Value of between 15 and 500 million Guinean francs At least 5 jobs	Enterprises whose export turnover is more than 22% of the total turnover	Cost of intermediate consumption of Guinean origin higher than 50% of the total cost	Production company with at least 90% of staff working in the area Service company with headquarters and main business office located in the area
Priority sectors of activities	Agriculture, industrial processing, livestock and fisheries, production of fertilizers, health and education companies, tourist facilities and industries, social housing development, investment banks or any other lending company outside Zone 1 (Conakry)			
Guarantees	• Equal treatment of individuals and companies and between foreigners and nationals • Freedom to transfer capital • Freedom of establishment, management, and movement • Guinea is a signatory of the ACP-EU, ICSID, MIGA, OHBLA			
Common advantages	• Exemption from duties and taxes (including VAT) on imports of goods, equipment, and tools needed for investments during the start-up period or for its extension (except for motor vehicles). • A single right of entry of 6% on imports of raw materials directly used in the manufacture of products. • Exemption from the taxable base for the <i>Impôt sur les Bénéfices Industriels et Commerciaux – IBIC</i> (Tax on Industrial and Commercial Profits) or the IS for 3 to 8 years depending on the zone in which the enterprise is situated and a reduction of 50% during the first tax year and 25% during the second year following the period of exemption. • Exemption from the apprenticeship tax and the tax on salaries for 5 years and 50% reduction of this tax during the following 3 years.			
Tax on incomes derived from trade and manufacture	20% (instead of 35%) over 5 years	Exemption for 5 years according to the export turnover/total turnover ratio, but a maximum of 60% of profits	Reduction in the taxable base of the IBIC equivalent to 20% of the value of intermediate consumption of Guinean origin for the first 5 years	Exemption from the IBIC for 3 to 8 years depending on the zone in which the enterprise is established

	SME Regime	Exporting Enterprise Regime	Regime for enterprises developing natural resources	Enterprises established in less developed areas
Other advantages	Exemption from the flat-rate minimum tax for 3 years	--	--	Reduction of 20 to 60% of VAT for 5 years depending on the area in which the enterprise is established



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