MEMO

471 mining squares each (403,7 km2), totaling 1413 mining squares (or 1211km2)
cover the Banalia iron (>1bt@63%Fe) and gold (target of 2MozAu) deposits.

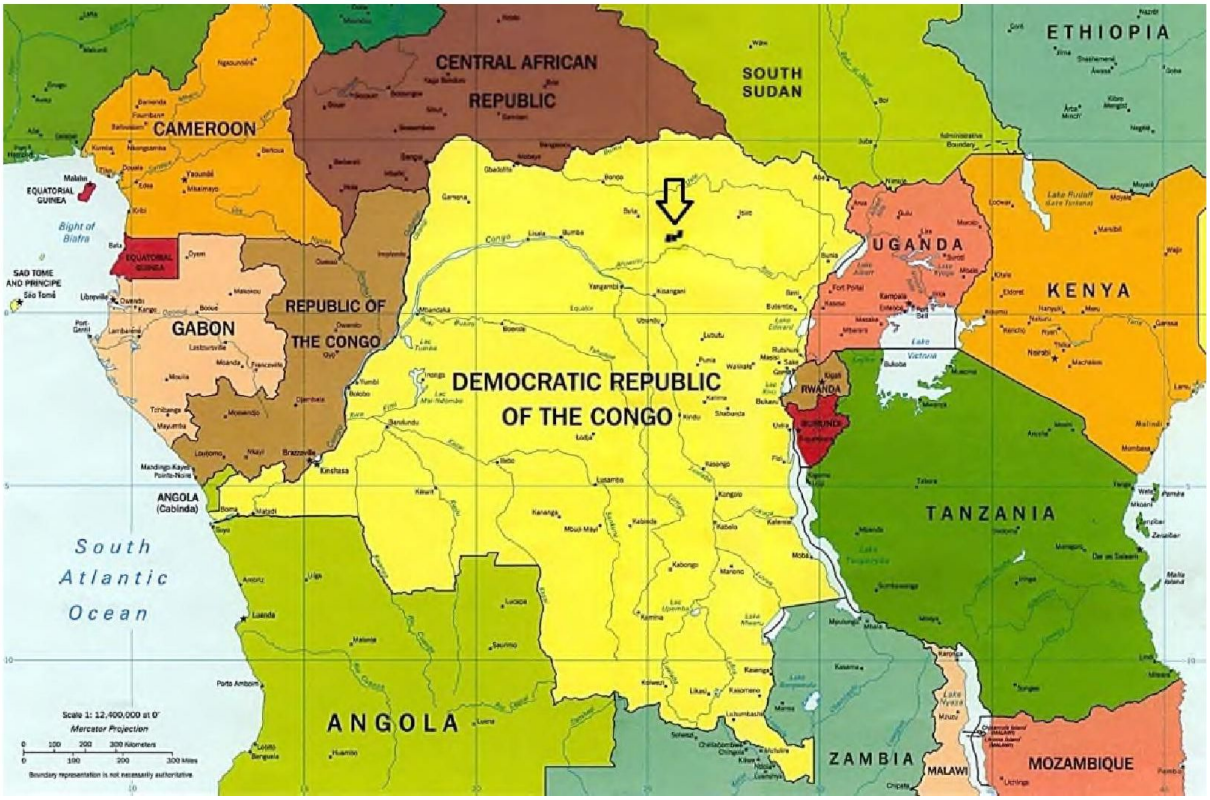
INDISPUTABLE MINING PERMITS

The legal summary published on http://thaurfin.com/SUMMARY.pdf demonstrates that the mining permits have never ceased to be valid and have been in the event of force majeure since their issuance for failure to obtain the certificates research in violation of art 109 of the mining regulations. As this synthesis documents, these 3 polygons were illegally covered by other permits granted to Dan Gertler which have always been non-existent.

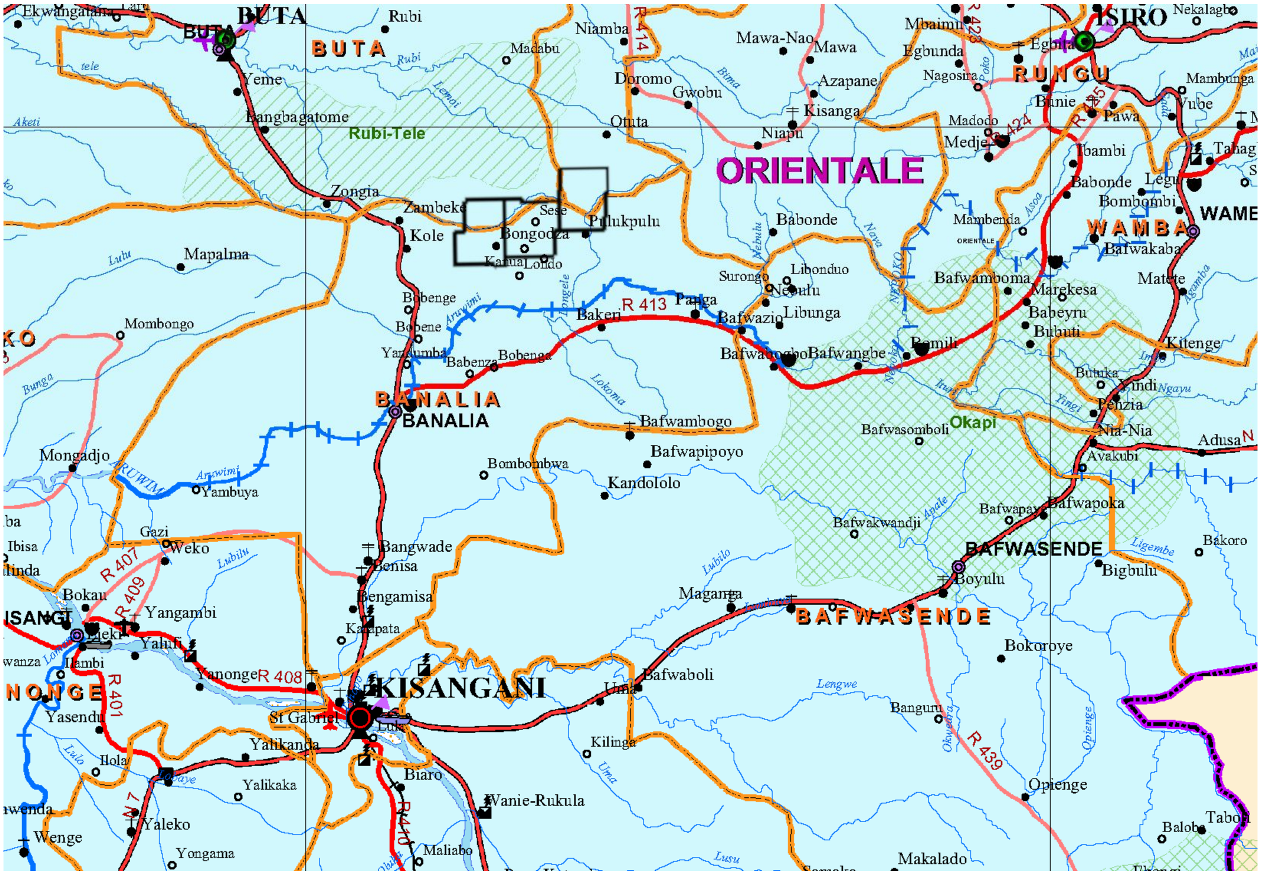
- The 3 PRs of Thaurfin ltd ensure absolute security for investors
- The various transfers made since their requests were carried out in accordance with the requirements of the mining code and were accepted according to art 185 of the 2002 mining code.

LOCATION : 220km from Kisangani, close of Congo River

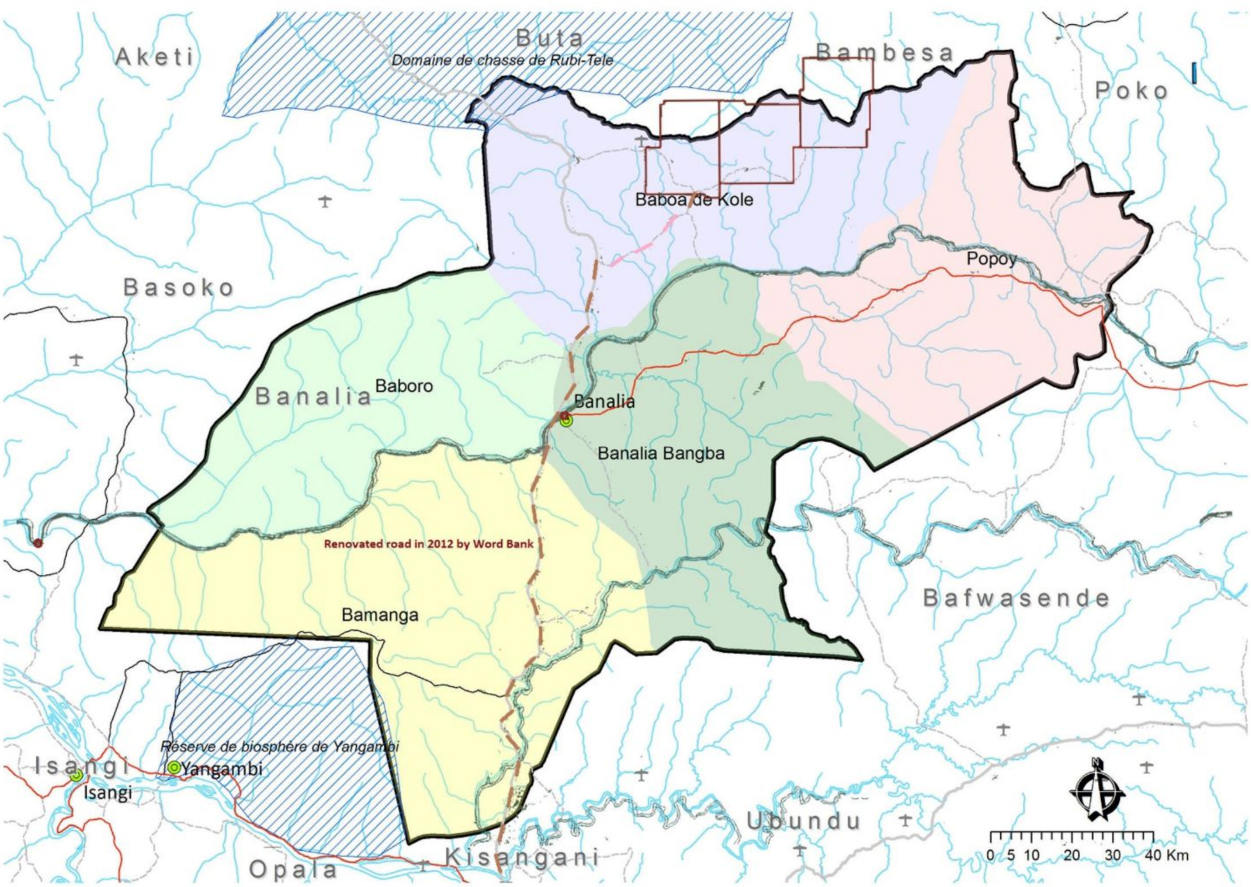
Map 01



Map 2

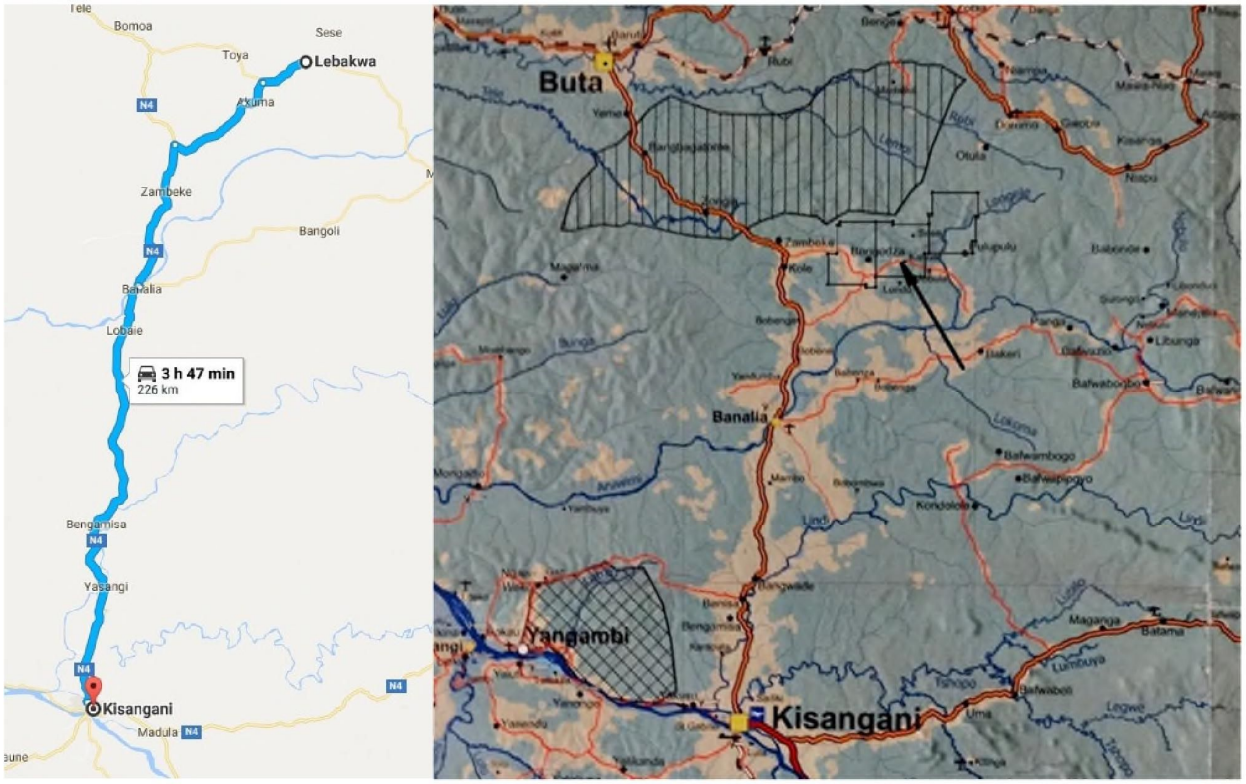

BUTA
ISIRO
ORIENTALE
Rubi-Tele
RUNGU
WAMBA
BANALIA
KISANGANI
BAFWASENDE
Okapi
R 413
R 407
R 409
R 408
R 401
R 410
R 439
Buta
Rubi
Yeme
Bangbagatome
Zongia
Zambeke
Kole
Bongodza
Sese
Pulukpulu
Mapalma
Mombongo
Mongadjo
Yambuya
Yangambi
Yanonge
Bengamisa
Bangwade
Bafwambogo
Bafwapipoyo
Kandololo
Bombombwa
Bafwasomboli
Bafwakwandji
Bafwapoka
Boyulu
Bafwaboli
Maganga
Kilinga
Wanie-Rukula
Biaro
Yalikande
Yalikaka
Yaleko
Yasendu
Niangara
Niamba
Doromo
Gwobu
Otuta
Niapu
Babonde
Mawa-Nao
Mawa
Azapane
Kisanga
Egbunda
Nagosira
Mbaimu
Madodo
Medje
Ibambi
Pawa
Babonde
Bombombi
Mambenda
Bafwakaba
Bafwamboma
Matete
Margkesa
Babeyru
Bubuti
Kitenge
Bafwangbe
Bafwasogbo
Bafwazio
Libunga
Libonduo
Surongo
Nebulu
Bakeri
Panga
Babenza
Bobenge
Bafwapay
Bakoro
Bigbulu
Bokoroye
Banguru
Opienge
Makalado
Baloba
Tabou
Avakubi
Nia-Nia
Penzia
Adusa
Ekwangatana
Madabu
Mambunga
Nekalagba

Map 3


Buta
Domaine de chasse de Rubi-Tele
Aketi
Bambesa
Poko
Baboa de Kole
Popoy
Basoko
Banalia
Baboro
Banalia
Banalia Bangba
Renovated road in 2012 by Word Bank
Bamanga
Bafwasende
Réserve de biosphère de Yangambi
Isangi
Isangi
Yangambi
Opala
Kisangani
Ubundu
0 5 10 20 30 40 Km

ACCESSIBILITY

Polygons accessible by a road that has just been rehabilitated, less than 4hours to reach the polygons from Kisangani. (https://www.celluleinfra.org/index.php/component/k2/item/6-achevement-du-troncon-kisangani-buta)



INTEGRATED PROJECTS

Thaurfin ltd proposes an integrated project, that is to say with a set of mutually supportive projects, one finances the other to allow the development of the Province.

Thus, the development of a hydroelectric power of 2000 MW will be financed by the export of 50 Mt of DSO class iron ore, the energy produced will make it possible to locally develop part of the iron ore production and the development of the Province and, in particular to rehabilitate the cement plant.
This dam will allow river transport from Kinshasa to Matadi, the flooded area will bring fisheries resources to the country etc...

Thaurfin ltd is developing innovative river transport, see http://www.thaurfin.com/Transport-Fluvial.pdf which will be produced entirely in Congo.

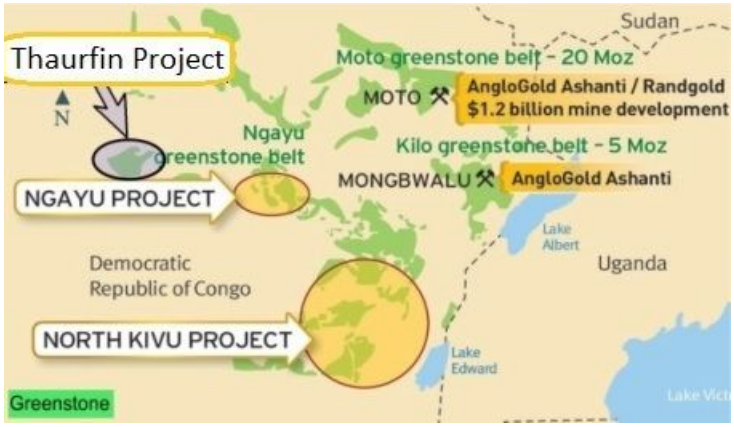
This project is the very type of a win / win project for all parties because this green steel industry will boost the development of the Province and the Country.

The development of this steel industry will provide manufacturers with very cheap electrical energy.
The Kisangani cement plant will be able to restart with the energy supplied and will be able to feed Kinshasa because of the modern fluvial transport that will be financed by this project.

The MIFOR project (see http://www.thaurfin.com/PROJET-MIFOR.pdf) does not compete with the river transport project. They are complementary since the river export project will be carried out well before the East/West railway project.

GEOLOGY

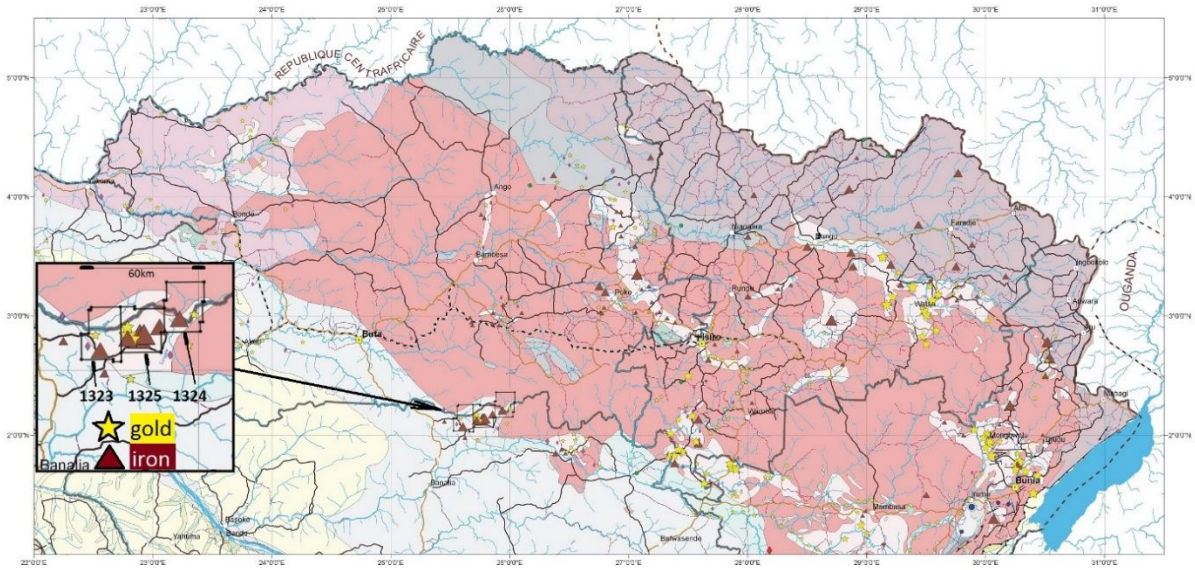
Gold deposit



Alluvial gold was mined during the colony, before 1960, by 4 colonial companies. Most of the prospectors was involved in alluvial and veins of quartz and ignored the disseminated gold.
The most attractive deposits in the region are disseminations. They occur in chemically responsive rocks : typically carbonates and pyritic or graphitic facies.
Gold reacts in BIFs (Banded Iron Formation) in a combination of chemical barrier (iron oxides) and the high tectonic competence of the rocks.

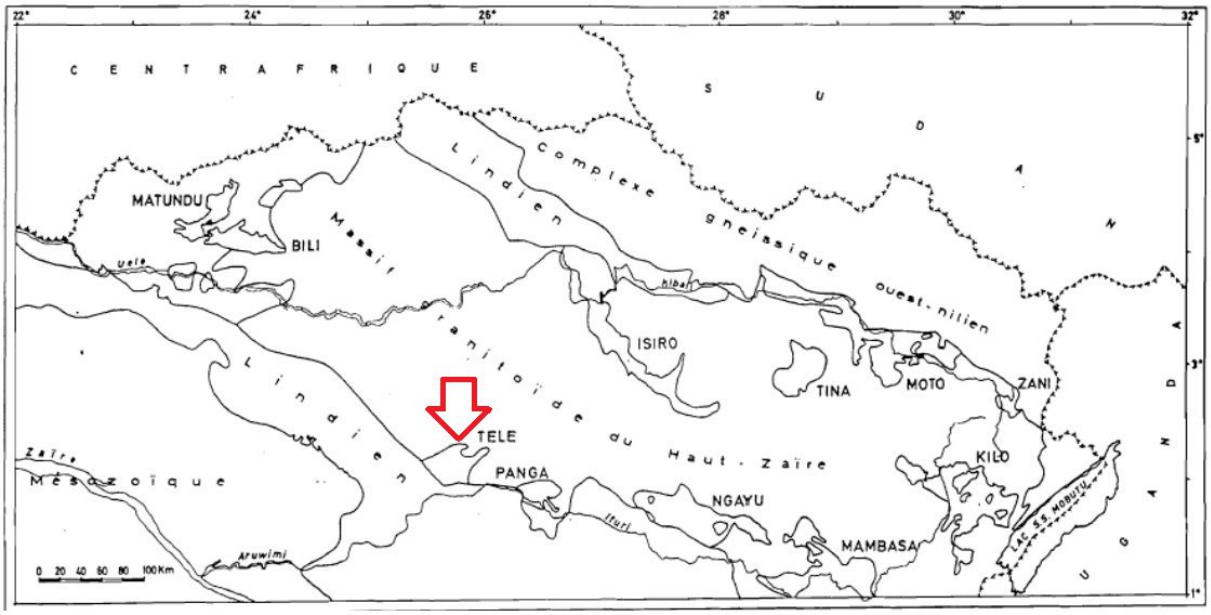
These mining permits cover the same geological environment as the well-known gold deposits in eastern of DRC.
This unexplored gold deposit should interest mining companies at a time where gold is being discovered at a fraction of the rate needed to replenish reserves

The granite is the result of the slow cooling, in depth, of large masses of intrusive magma which will most often form plutons, the latter finally outcropping by the play of erosion which strips the overlying rocks. This is the part in pink on the regional map below.



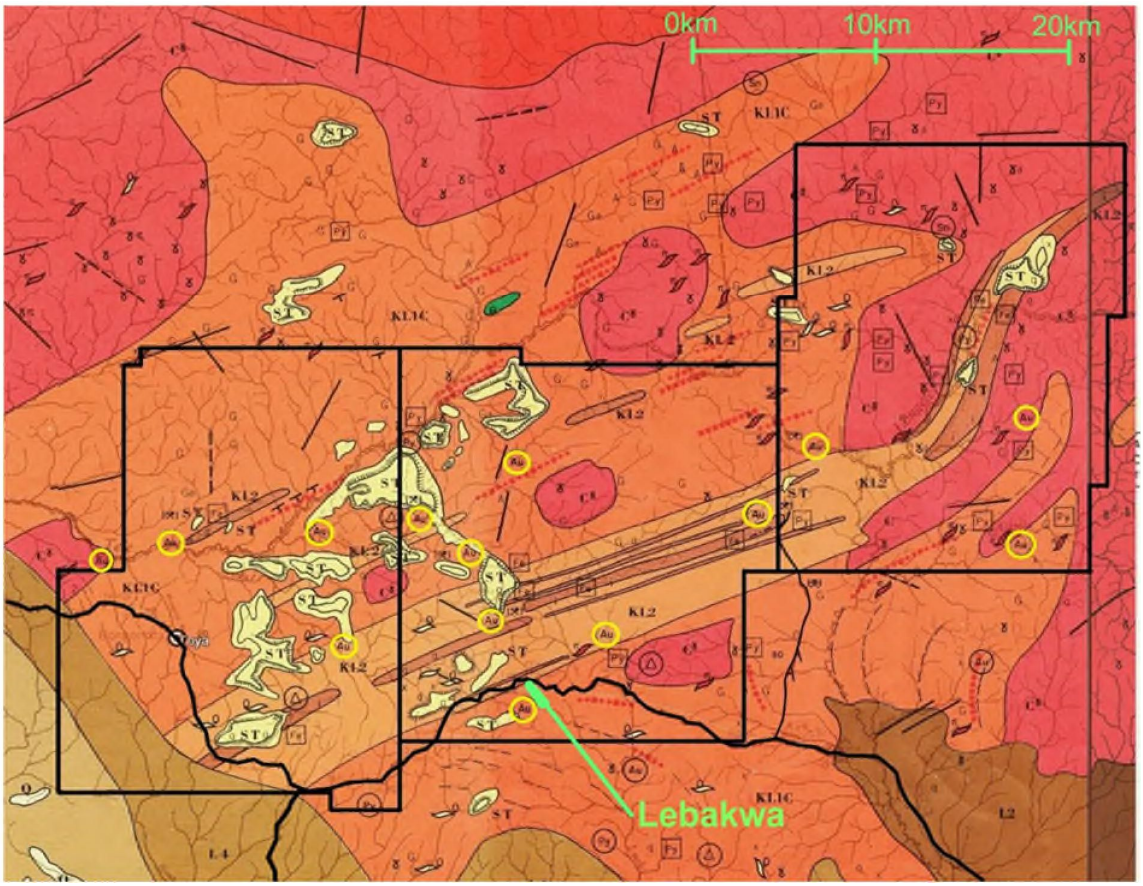
The last phase of consolidation of the granite massif is the hydrothermal phase, the pressure increases and the granite expels hydrothermal fluids responsible for the gold mineralization of the rocks bordering the granite massif which are metamorphosed by the pressure and heat of the granite.

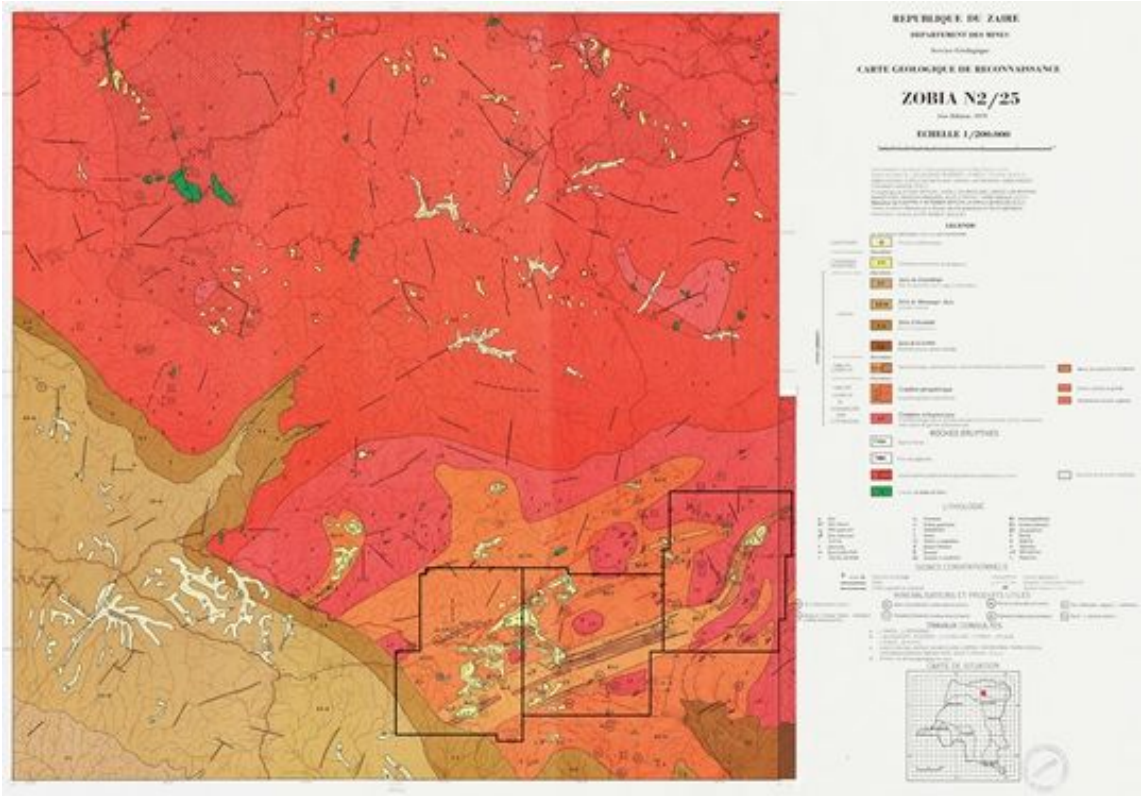
A string of metamorphic greenstone borders a granite massif stretching from Tanzania to the Central African Republic



Northern DRC geological sketch(simplified after LEPERSONNE, 1974.

This BRGM map shows the presence of gold on the 3 mining polygons

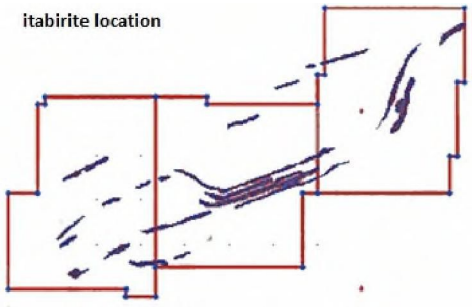




The gold mineralization is of the disseminated type of large extent and low grade. Upgrading techniques achieve excellent recovery rates for these deposits. The artisanal miners replaced the 4 colonial cpy. As the disseminated gold was not well known at the time, no prospecting holes were carried out. By analogy with other green rocks bordering the same granite, it is estimated that the reserves will be greater than 2MOz.

Iron deposit

In 1974, while the President Mobutu decided to build a steel industry in Kinshasa, the italo-belgian company Sicai-Tractionnel (Tractebel now) carried out a surface prospection of the iron deposit of Mbomo Mountains (cf http://thaurfin.com/SICAI.pdf) that had to feed this steel industry built in Maluku (near Kinshasa). This white elephant only worked for 5 years at 10% of its capacity. Mbomo iron deposit has never been exploited.



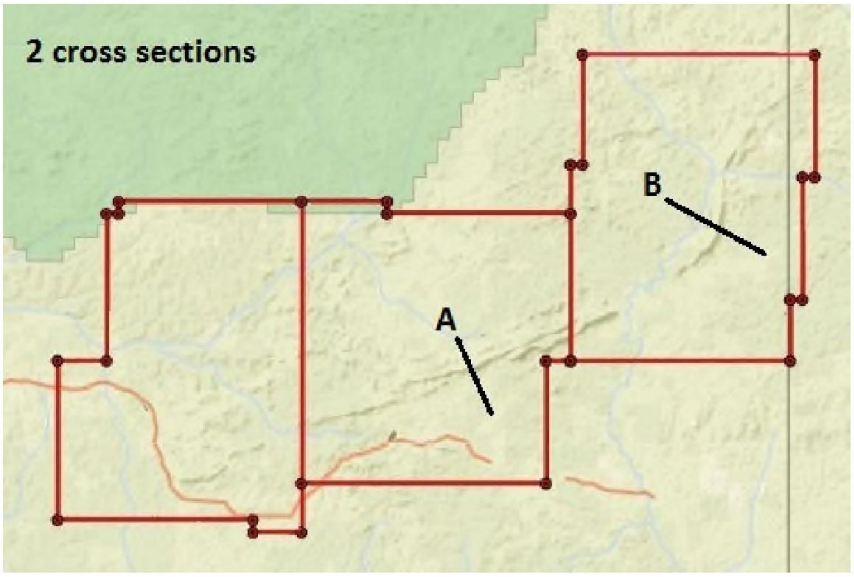
99% of these itabirite are located inside our 3 polygons.

As the sedimentary deposit shows a significant slope (about 65°), the surface prospecting is easy : trenches dug perpendicularly present a perfect section of this sedimentary deposit, originally horizontal.

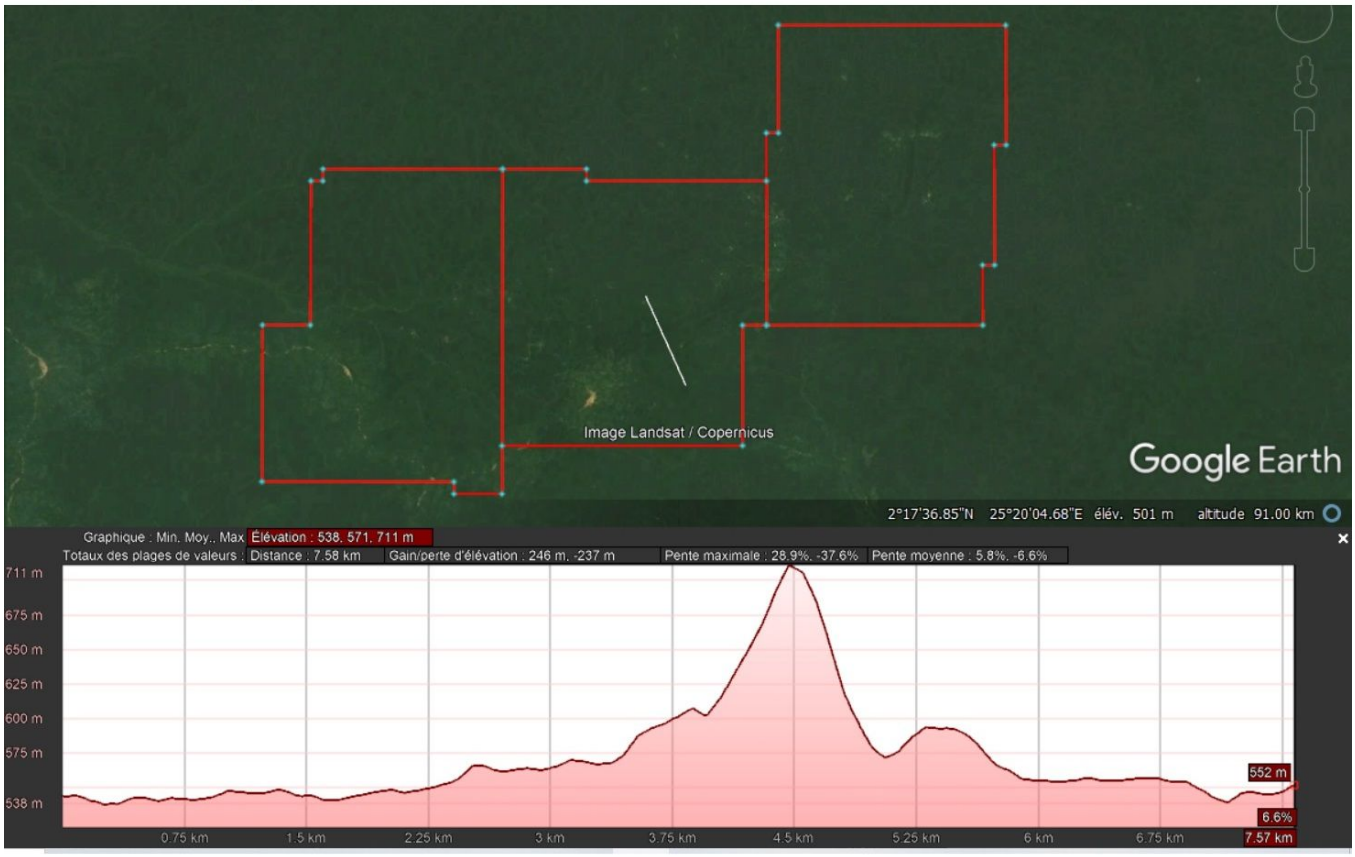
Since itabirites are of sedimentary origin, they have sufficient continuity to allow extrapolations that are no risky. The horizontal extension of these itabitite is about 60km ; an extrapolation on 70m in the other original horizontal axe (60° slope now) has to appear as ridiculous to create doubt on the extrapolation.

The report Sicai Tractionnel shows, 968 Mt of ore@65,3% and another 900Mt@45%Fe was calculated on the basis of an extrapolation of the surface prospection on a depth of 70m. This Sicai-Tractionnel prospection was carried out in surface by trench. It is very interesting to note that the tectonics strongly straightened the sedimentary deposit which was horizontal at the origin.

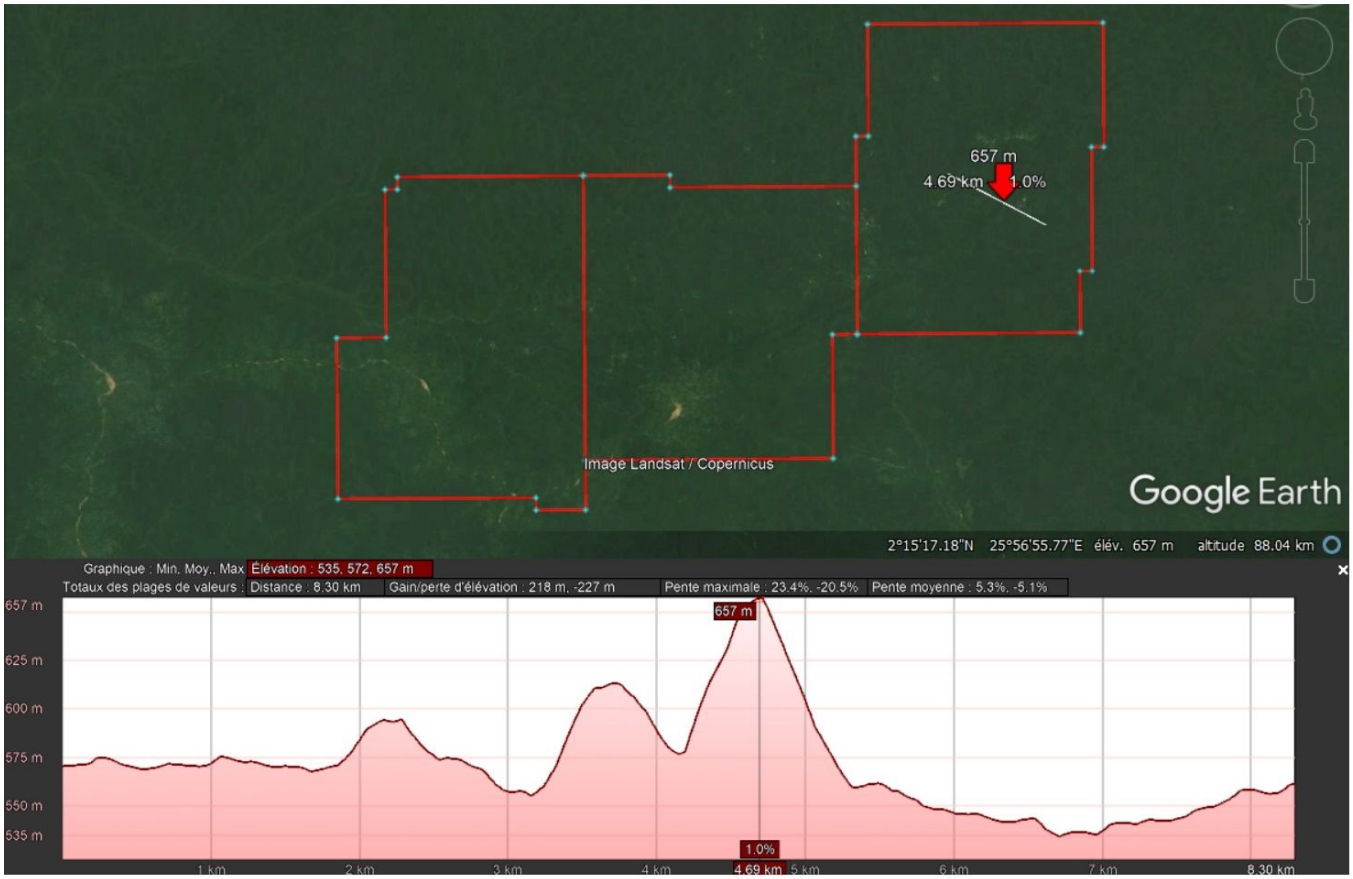
On addition, better resistant to erosion, itabirites have created mountains of more than 100m as shown in these cross sections



Vertical drop : 711m-541m = 170m



Vertical drop : 657m-535m = 122m

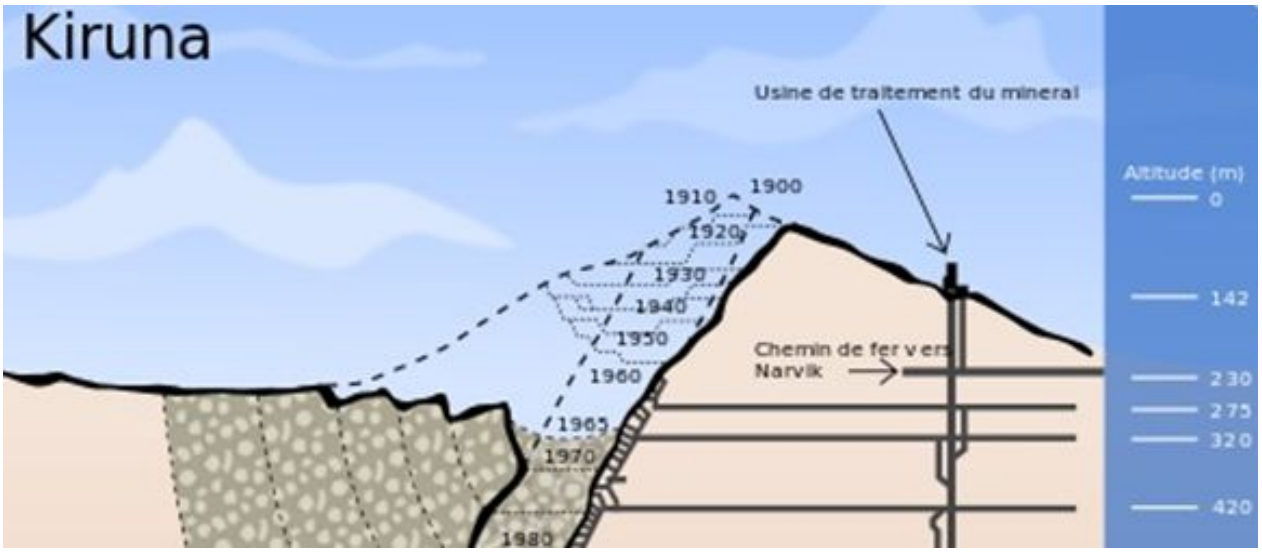


OPERARING CONDITIONS OF THE IRON DEPOSIT

The slope of itabirite forming more than 100m mountains offers significant advantages for its exploitation. Over the plain, there are no dewatering problem and the exploitation tracks will be arranged axially to minimize the volume of the ultimate pit.

The extrapolation of the surface prospecting was carried out on depth of 75m, it should be done on a depth of more than 100m from the time itabirite are sedimentary origin, that means continuous.

The surface geometry of the Banalia iron deposit resembles that of the Kiruna mine, although the geology is very different (see http://www.thaurfin.com/Kiruna.pdf).

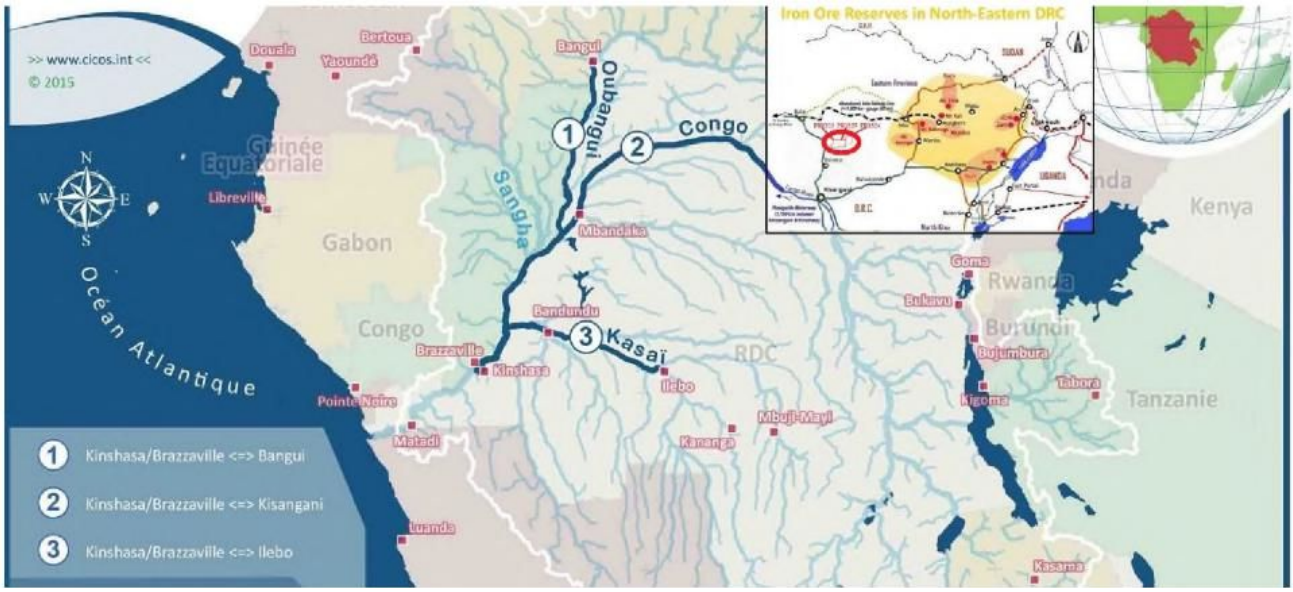


By similarity, an extrapolation of 150m from the results of the surface prospecting would be amply justified. Prospecting by drilling will bring definite reserves of more than 2Mt@65%Fe. (http://www.thaurfin.com/SICAI.pdf).

EXPORT OF 50Mt PER YEAR OF IRON ORE

The iron resources of the former Eastern Province are estimated at 20bt. The Banalia deposit is closest to the Congo River which facilitates export to the next deep water port of Banana. Here is the map of iron deposits in Eastern Congo

superimposed on the map of the main rivers.

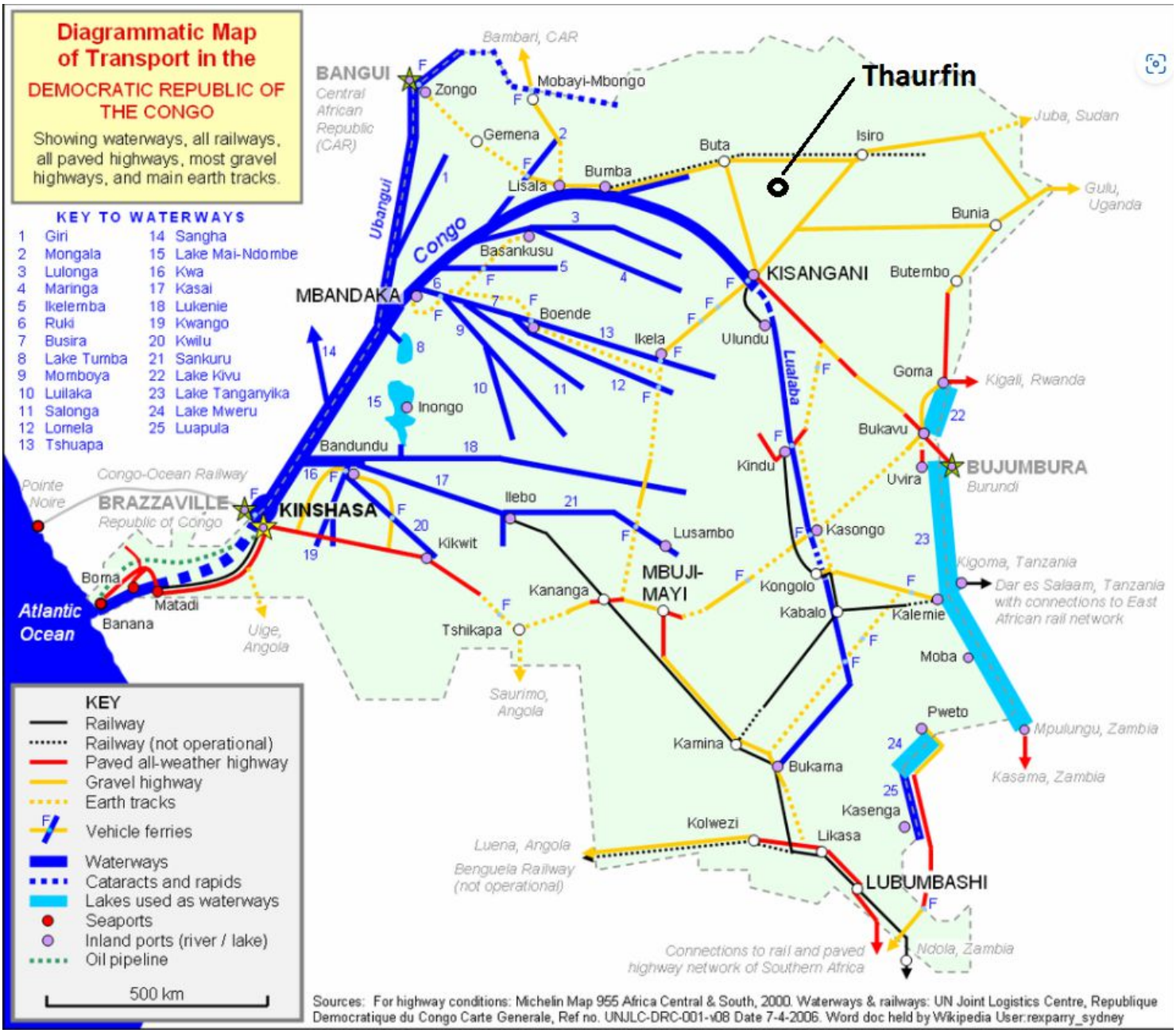


LOGISTIC

- Between the mine and the river, 200 km of double railway line must be built
- Between Kisangani and Kinshasa transport is by river down the Congo River
- Between Kinshasa and the Atlantic Ocean, a double railway line will have to be built to serve the new deep-water port of Banana

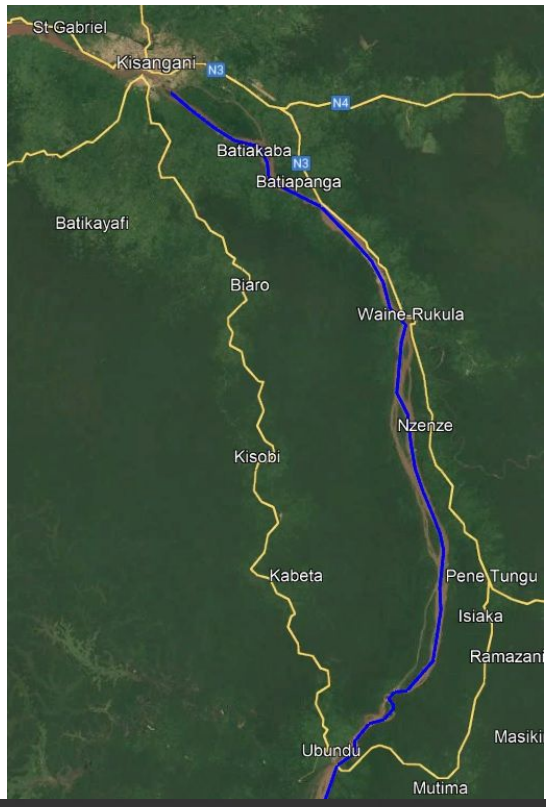
Between Kisangani to Kinshasa, the iron is transported by convoys of barges controlled by satellite.

Thaurfin ltd develops an innovative river transport of railway convoys (cf in French : http://thaurfin.com/Transport-Fluvial.pdf



2000MW HYDROELECTRICAL DAM IN WANIE RUKULA hydroelectrical

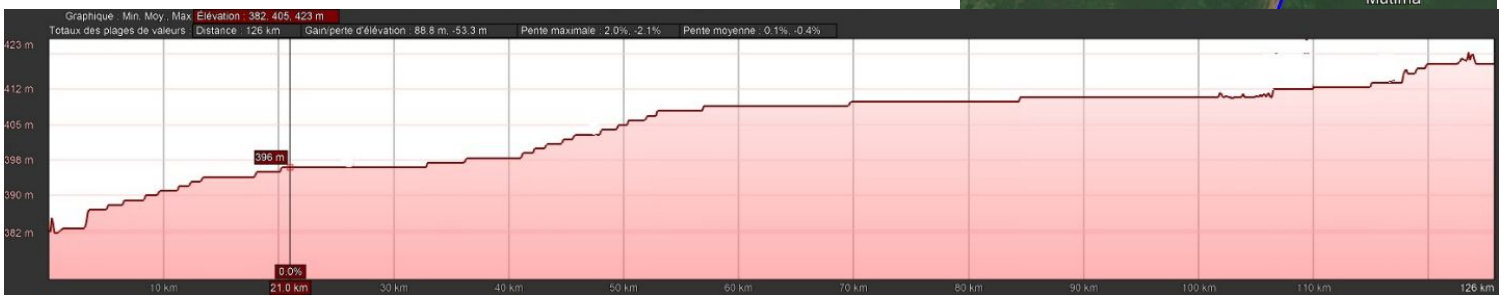
Between Kisangani and Ubundu, the river's elevation change is 37m, with a flow rate of 6180m³/sec; the available power, assuming a 90% energy efficiency, is 2000MW

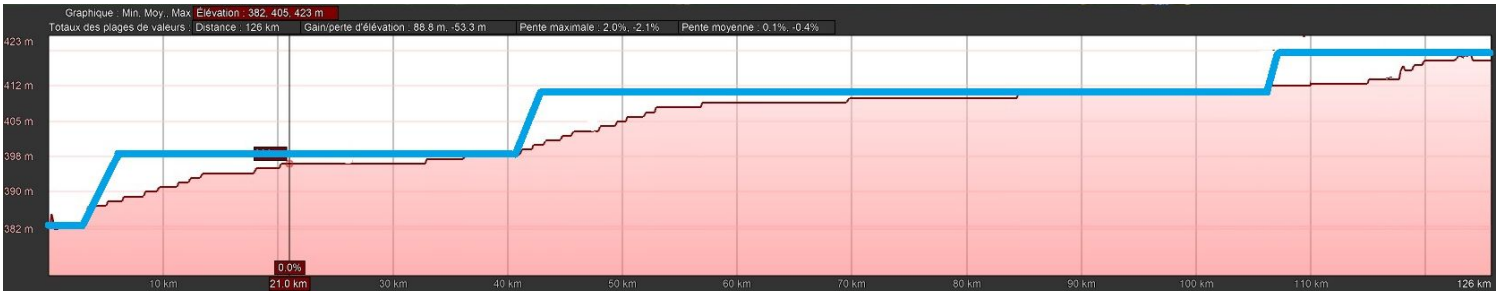


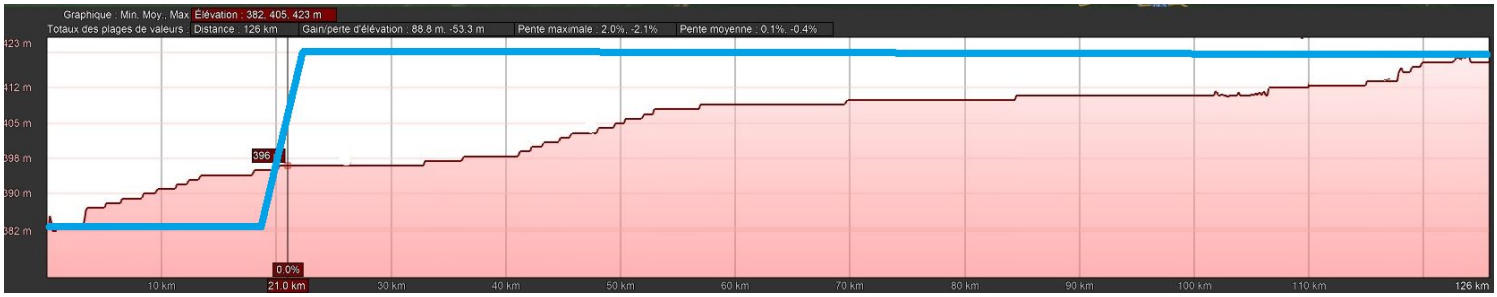
Power of the hydroelectric dam : 2000MW

D Kisangani		6180 m3/sec	PS1
	niveau aval	383 m	
	niveau amont	420 m	
H		37 m	
P = D*H*9.81/1000 MW		2242 MW	
energy efficiency (ρ)		90%	PS2
P*p		2018 MW	

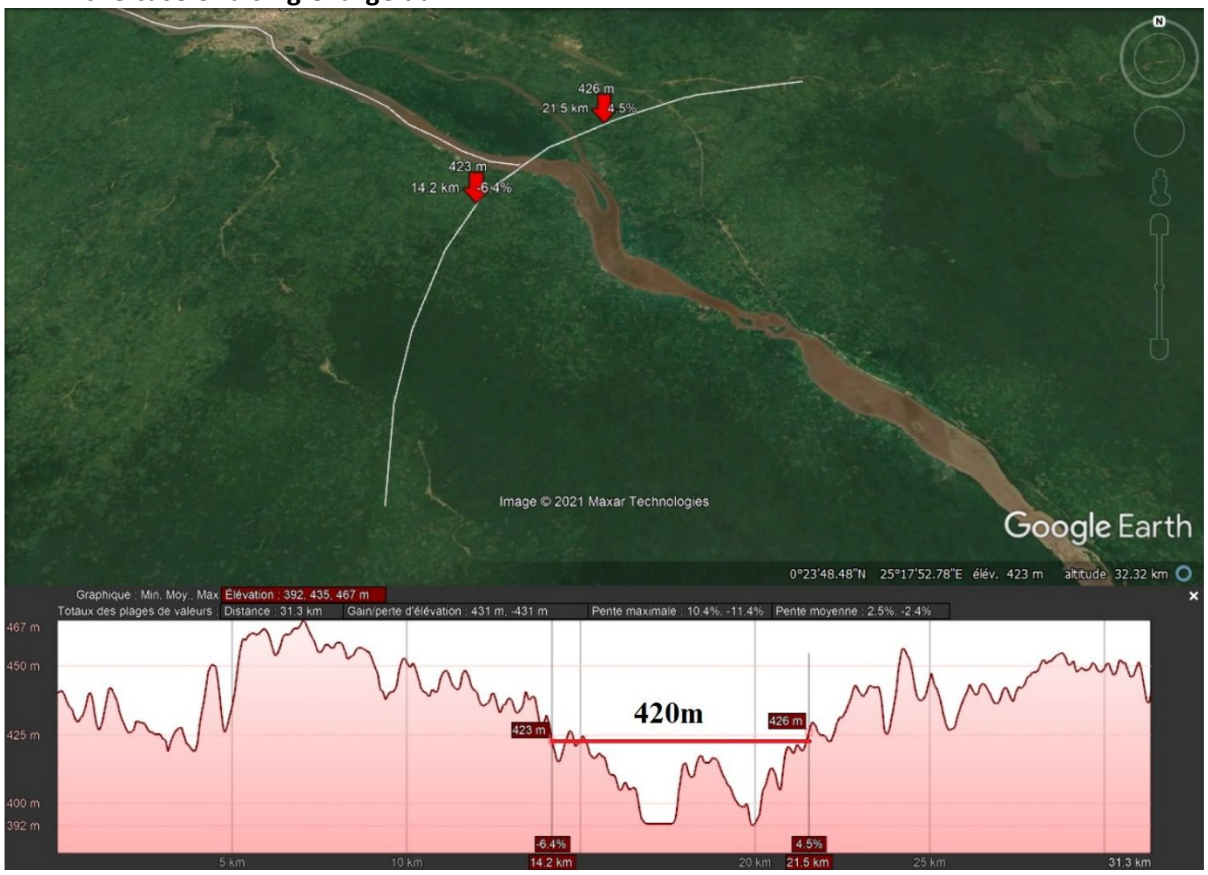
Depending on the river profile, three dams can be built at the three major elevation changes of the river or a single large dam is likely to take advantage of the 37m elevation change by creating a large reservoir between Kisangani and Ubundu.



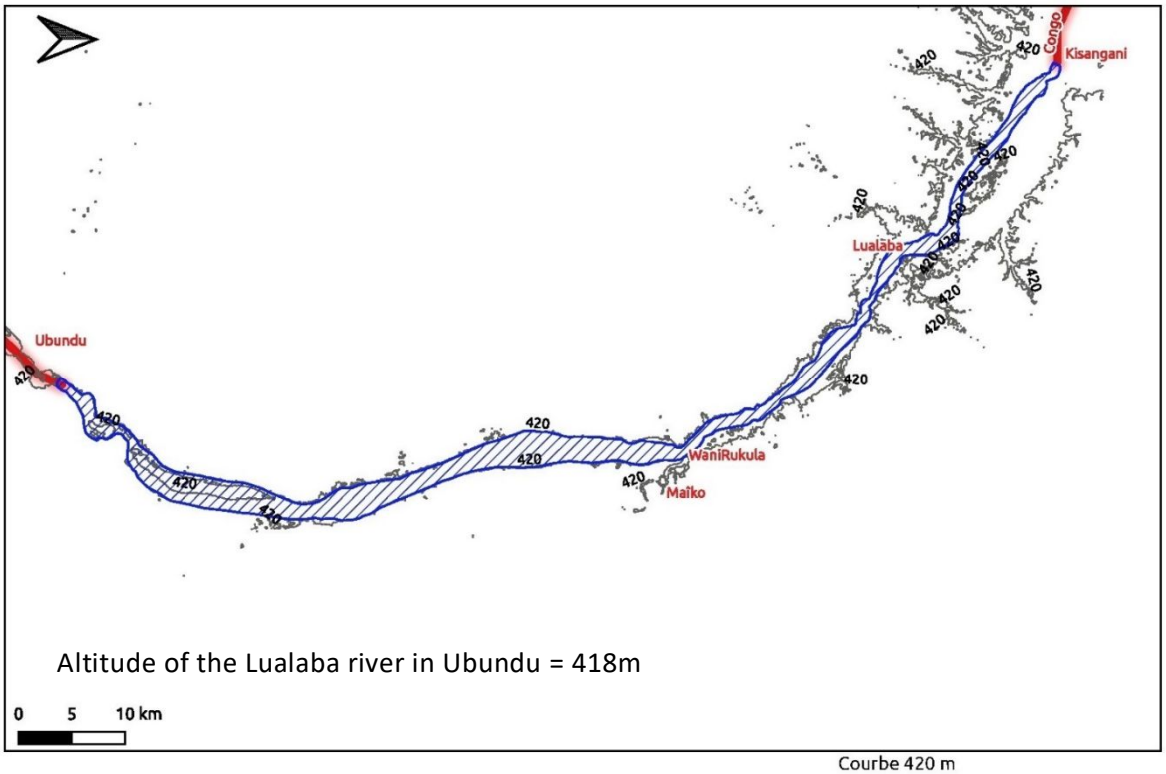




In the case of a single large dam

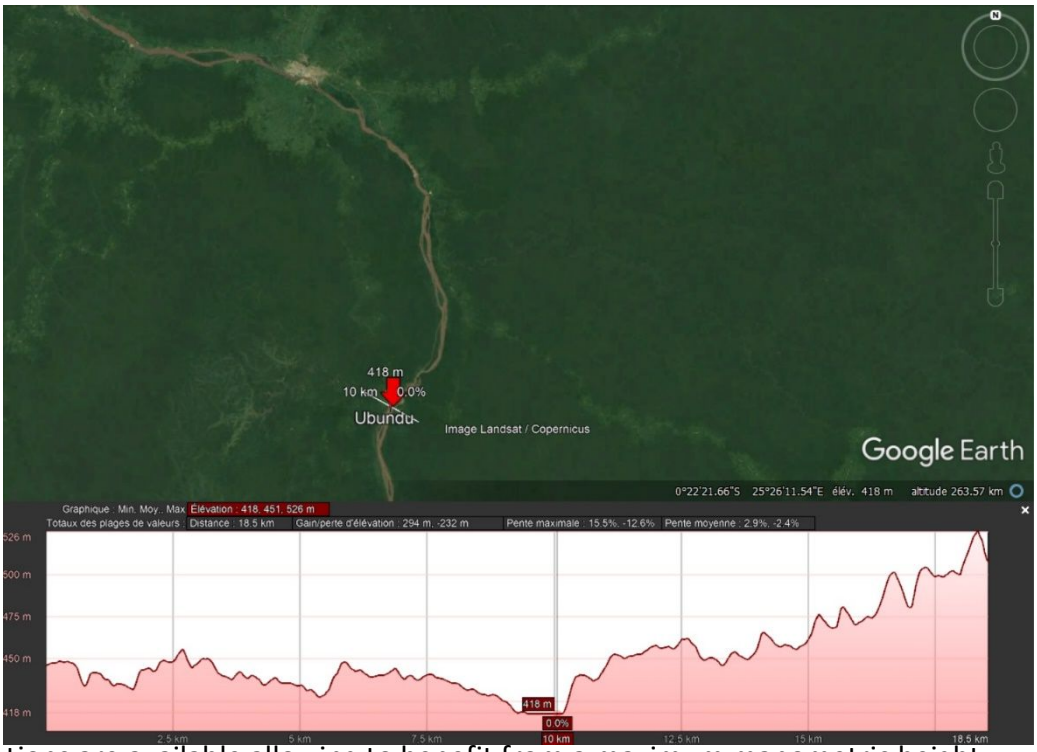


inundated land at 420m



Altitude of the Lualaba river in Ubundu = 418m

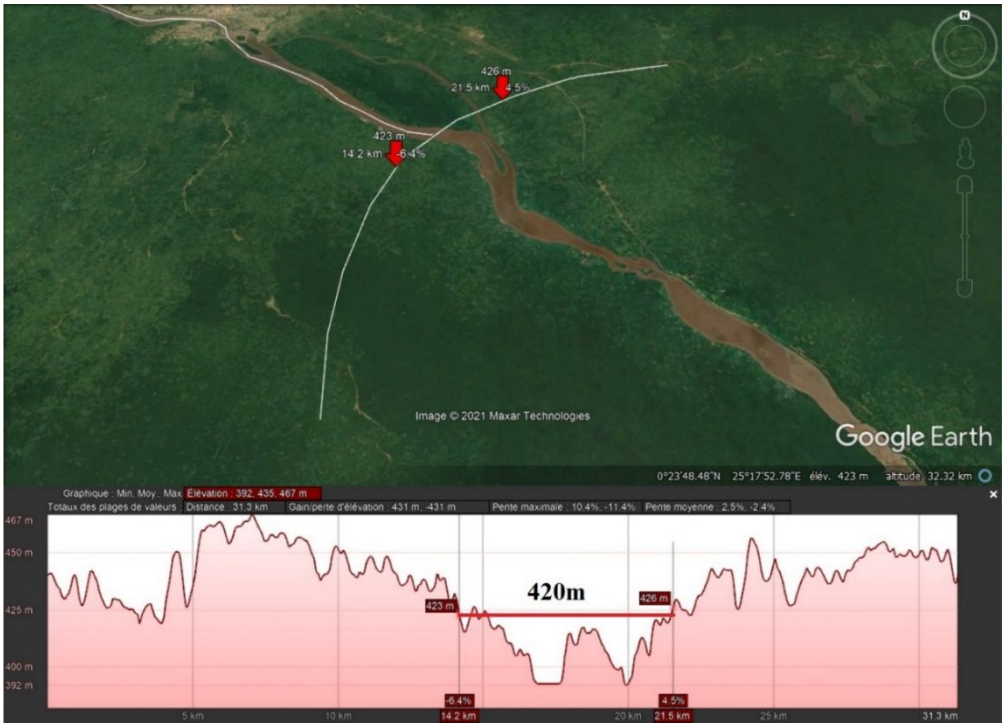
Courbe 420 m



Two solutions are available allowing to benefit from a maximum manometric height

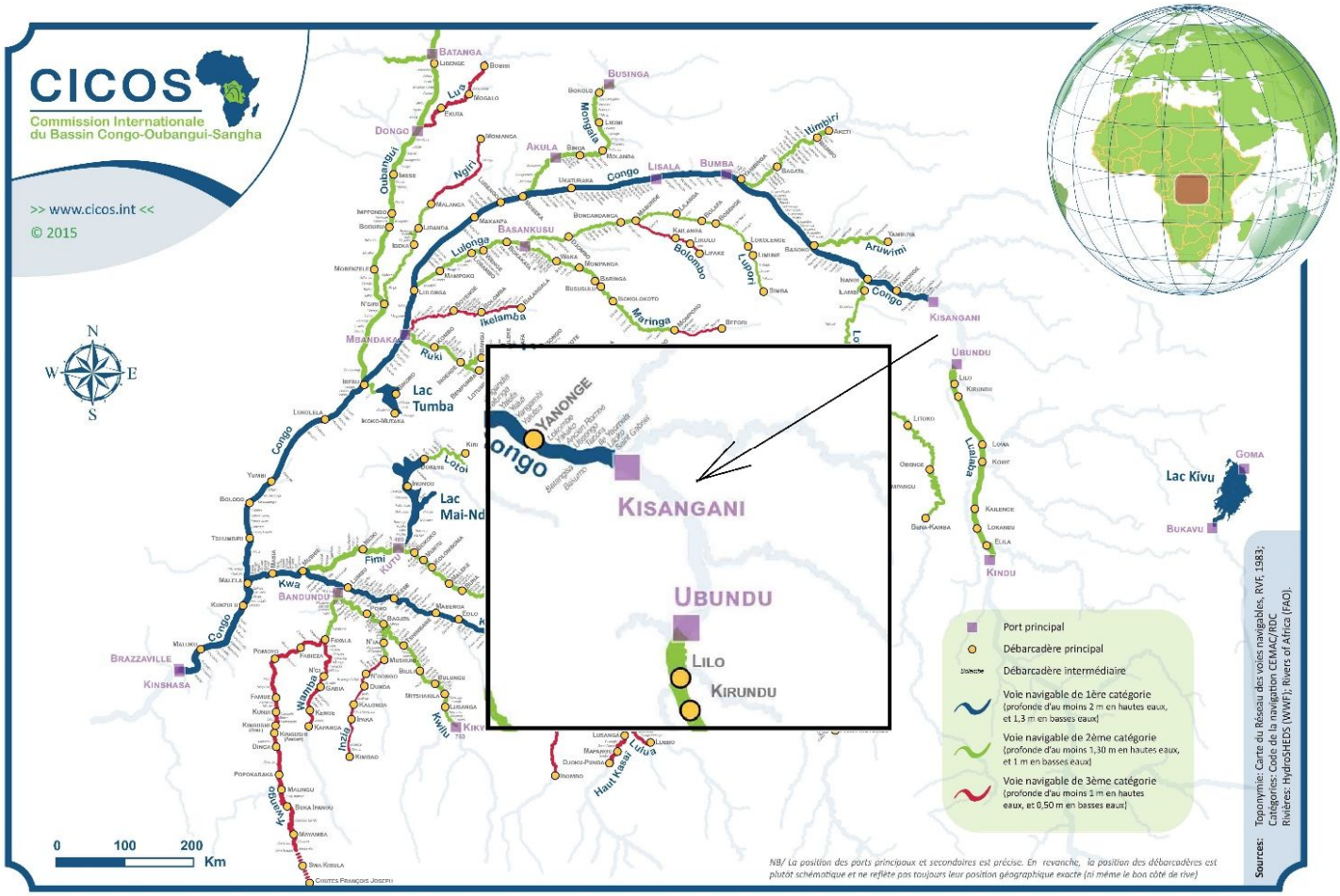
1 The dam is built as close as possible to Kisangani, at the lowest level of the river

2 The dam is built at a further distance from Kisangani and a channel is dug to keep the river level as low as possible.



KINSHASA-KINDU AIRWORTHINESS

Between Kisangani and Ubundu, the river is not navigable. A railway was built to link Kinshasa to Kindu.



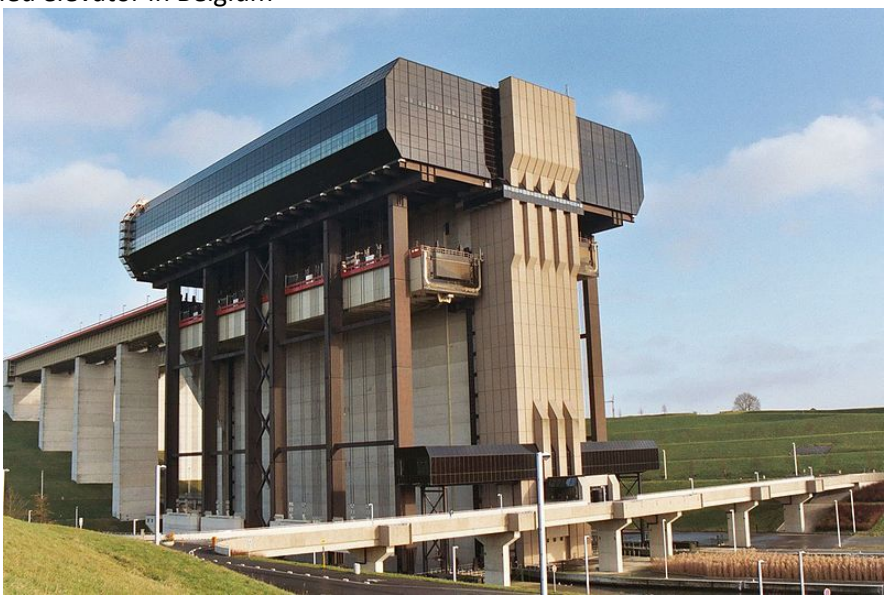
The construction of the dam will make the Lualaba River navigable between Ubundu and the dam. This dam will allow rapid and efficient transport between Kinshasa and Kindu.

1 - rail convoys will be quickly transhipped

Thaurfin ltd develops an innovative river transport of railway convoys suitable for the Congo and Lualaba rivers, a short railway junction from the lower level (Congo river) to the upper level (Lualaba river) the dam will allow rapid transport between Kinshasa and Kindu (cf in French :http://thaurfin.com/Transport-Fluvial.pdf

2 - An elevator will allow barges to sail from Kinshasa to Kindu

Example: Strépy-Thieu elevator in Belgium



Example: Ronquière inclined plane in Belgium

GREEN STEEL INDUSTRY IN KISANGANI

BY DRI/H2

The local enhancement of the iron deposit will finance the development of the whole Province by offering it a new green steel industry

Thanks to the happy combination of these conditions:

- 2000MW of cheap hydro-electrical energy available in Wanie Rukula
- High grade iron deposit produce high grade iron sponge

Direct Reduction Iron (DRI) steel industry near Kisangani will produce very competitive steel.

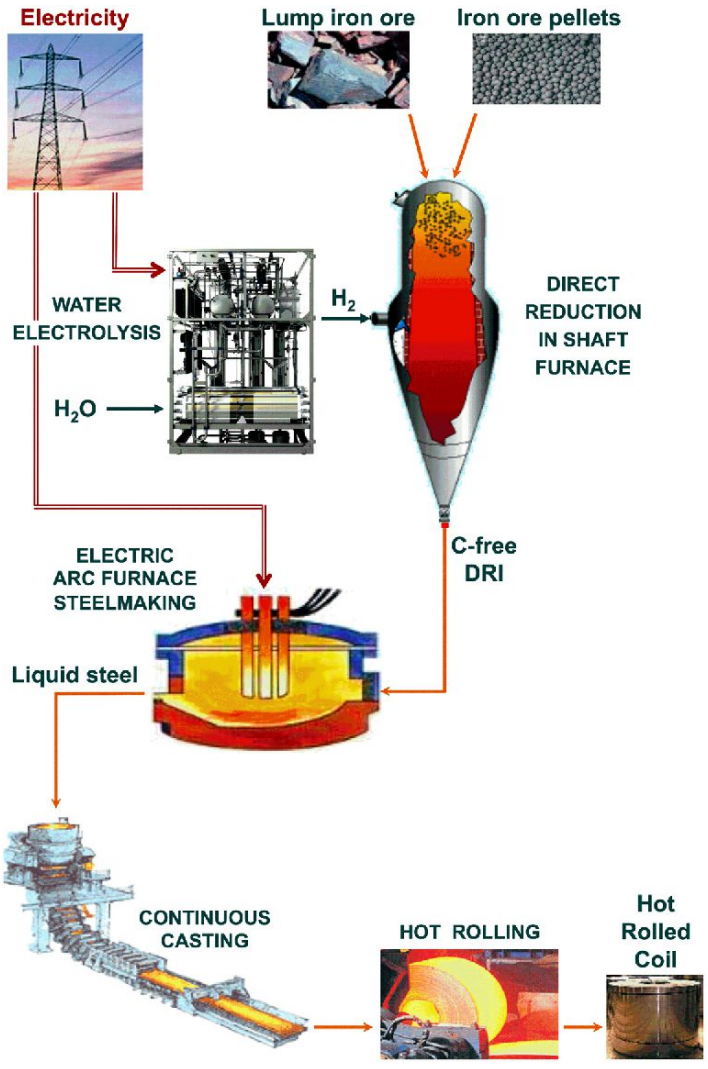
The DRI/H2 is now operational, this hydrogen will be produced by electrolysis thanks to the power of the hydroelectric dam.

Making iron and steel is an energy and carbon intensive process. It is estimated that it will account for 7% of global carbon dioxide (CO2) emissions in 2020, making it one of the most energy-intensive industries in the world. The reduction of iron ore in blast furnaces using a concentrated form of coal (coke) is the main source of CO 2 emissions.

Most steel is produced via the Blast Furnace-Basic Oxygen Furnace (BF-BOF) route. Blast furnaces produce iron from iron ore. In a second step a basic oxygen converter turns iron, with some additions of scrap, into steel.

Traditionally, DRI is produced from the direct reduction of iron ore using natural gas, but emerging technology is enabling the production of DRI using hydrogen as well. Depending on the source of the hydrogen, this offers the potential for truly green steel.

Hydrogen-based DRI is, therefore, expected to be a major decarbonization lever for steelmakers. A number of companies have already announced plans to introduce DRI, and strong growth is expected in the future. In fact, scenarios based on a carbon-neutral steel industry—a goal many major steelmakers have pledged—have DRI production tripling within the next 30 years.



A report, released by the U.S. Energy Information Administration (EIA) in February 2022, explores steel industry decarbonization pathways and their implications for energy use and CO 2 emissions, in four regions specific. IEO2021 Issues in Focus: Energy Implications of Potential Iron- and Steel-Sector Decarbonization Pathways highlights the critical importance of electrolytic hydrogen in decarbonizing the steel sector.

To produce high-quality, low-carbon steel, the EIA outlines two key elements: the use of electrolytic H2 as a reducing agent in the direct iron reduction process and the powering of electric arc furnaces. with renewable energy derived from solar, wind, biomass. , waste or geothermal electricity. Hydrogen has been shown to be the only reductant in the DRI process.

BY DRI/CH4 WITH METHANE GAS FROM LAKE KIVU

A gas pipeline must be built between the methane gas extraction sites and the steel industry located in Kisangani. Reducing oxides through direct reduction to methane gas is the most profitable use for the DRC, which has considerable hydroelectric potential.

VALUATION OF NIOBIUM

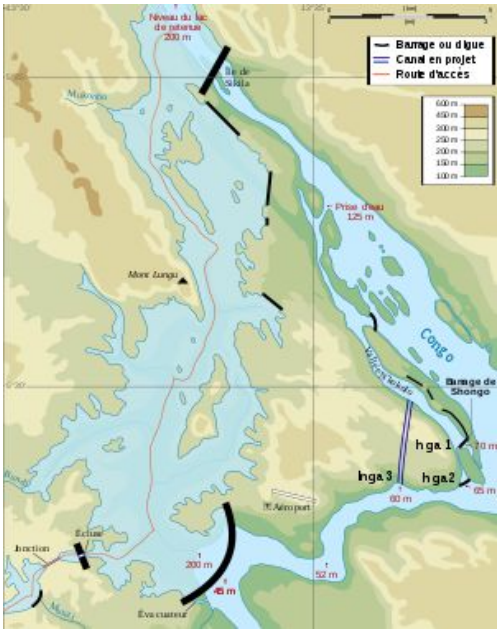
The Niobium contained in Coltan is very little valued
It would be advantageous for the Republic to valorize it locally by manufacturing alloy.
Indeed, niobium is an alloying agent which gives considerable properties to the materials to which it is added. For example, steel containing niobium resists corrosion and is stronger and lighter than pure steel.

GREEN STEEL INDUSTRY IN MATADI

The total of the Inga dams complex (sometimes called itself "Grand Inga") would include four production units, for a total power of 45,275 MW distributed as follows:

- Inga I (currently operating at 20% capacity, 45 meter drop): 351 MW
- Inga II (currently operating at 20% capacity, 50 meter drop): 1,424 MW
- Inga III (planned, 55 meter drop): 4,500 MW
- Grand Inga / Bundi power station (planned, 155 meter drop): 39,000 MW

The series of dams could offer energy equivalent to twice the output of China's Three Gorges Dam, which would make it the largest hydroelectric power station in the world.



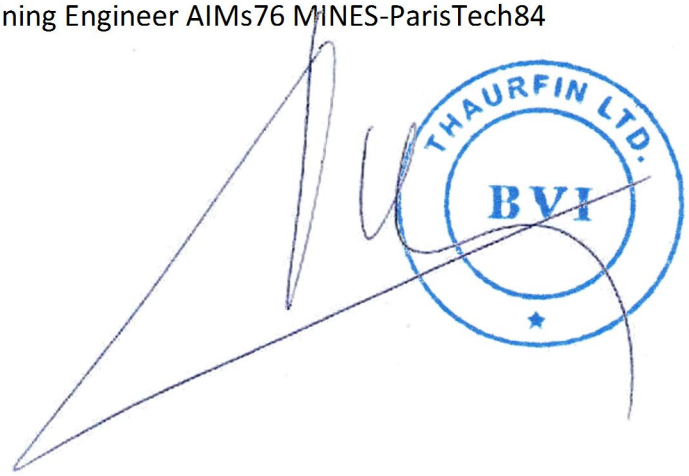
CONCLUSION

Thaurfin ltd is requesting prospecting certificates for its 3PRs which have not been issued in violation of mining legislation. This file provides evidence that these 3PRs have never ceased to be valid and have remained in force majeure since their grants, causing the freezing of the development of the Republic and heavy damage to the company Thaurfin ltd.

Thaurfin ltd participates in the wishes of the President of the Republic

Thaurfin ltd offers His Excellency the President of the Republic the implementation of projects in a win/win spirit which will consolidate the sovereignty of the Republic through the motto of maximizing the local development of natural resources.

Ir Pol HUART
Thaurfin ltd director
Mining Engineer AIMs76 MINES-ParisTech84



PS http://thaurfin.com/hydrographiques-Lualaba-1952-1954.PDF

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CLASSE
Des SCIENCES TECHNIQUES

Misandres in-11.. Nouvelle série.
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Koninklijke Academle
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KLASSE
DER TECHNISCHE WETENSCHAPPEN

Verhandclinges in-Sa. Nieuwe reeks.
Bock 1, &Bey. 2.

Études hydrographiques dans le bassin du Lualaba (Congo belge) (I 952-1 954)

PAR

J. CHARLIER

INGÉNIEUR A, 1, lia.
{SERVICE DES Vnras reAvrannLas nu CONGO BELGE) |

Cette nouvelle série constitue la suite de la collection de Mémoires *In-8'.* publiée par l'Institut Royal Colonial Belge de 1929 à 1954.

Due nieuwe reeks is de voortzetting der verzameling van de *Verhandelingen in-8* uitgegeven door het Koninklijk Bel-gisch Kolonlaal Institue van 1929 tot 1954,

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Avenue Marnii, 25
BRUXELLES

Marnirlaan, 25
BRUSSEL

On page 26, these different flows were noted in Ponthierville (Ubundu)

TABLEAUX VI à XXX. — *Résultats numériques des jaugeages* (1).

date	lecture échelle	largeur	section mouillée	profondeur maximum	rayon hydraulique	vitesse moyenne	débit	numéro d'ordre
	m	m	m²	m	m	cm/s	m³/s	
VI. — SECTION DE PONTHIERVILLE. Km 0 (BM).								
7. 5.52	4,28	636	8.112	18,00	12,63	136,8	11.100	1
1.10.52	2,55	625	7.020	16,20	10,83	93,2	6.540	2
14.11.52	3,06	628	6.950	16,80	10,70	106,8	7.425	3
19. 3.53	2,84	626	6.600	15,20	10,20	100	6.620	4
1. 8.53	0,00	610	4.720	14,00	7,55	53	2.500	5
5. 8.53	0,76	615	5.300	15,00	8,40	64	3.360	6
16.10.53	1,61	615	5.680	15,60	8,95	85	4.800	7
11. 1.54	2,90	626	6.350	16,20	9,80	111	7.050	8

	1	2	3	4	5	6	7	8
cm/sec	136,8	93,2	106,8	100	53	64	85	111
m/sec	1,368	0,932	1,068	1	0,53	0,64	0,85	1,11
m2	8112	7020	6950	6600	4720	5300	5680	6350
m3/sec	11097	6543	7423	6600	2502	3392	4828	7049

The average of these 8 observations is : 49433/8 = 6179m3/sec

PS2 according to this publication https://www.usbr.gov/power/edu/pamphlet.pdf , the energy efficiency of hydroelectric power plants is around 90%

Reclamation's 58 powerplants throughout the Western United States produce an average of 42 billion kWh (kilowatt-hours) per year, enough to meet the residential needs of more than 14 million people. This is the electrical energy equivalent of about 72 million barrels of oil. Hydroelectric powerplants are the most efficient means of producing electric energy. The efficiency of today's hydroelectric plant is about 90 percent. Hydroelectric plants do not create air pollution, the fuel--falling water--is not consumed, projects have long lives relative to other forms of energy generation, and hydroelectric generators respond quickly to changing system conditions. These favorable characteristics continue to make hydroelectric projects attractive sources of electric power.