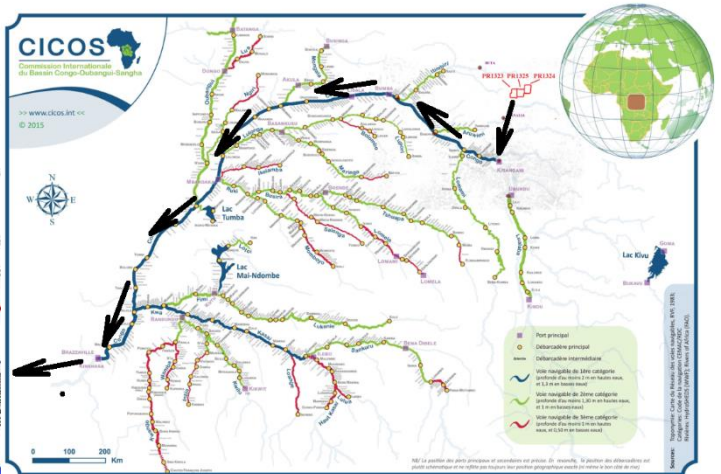
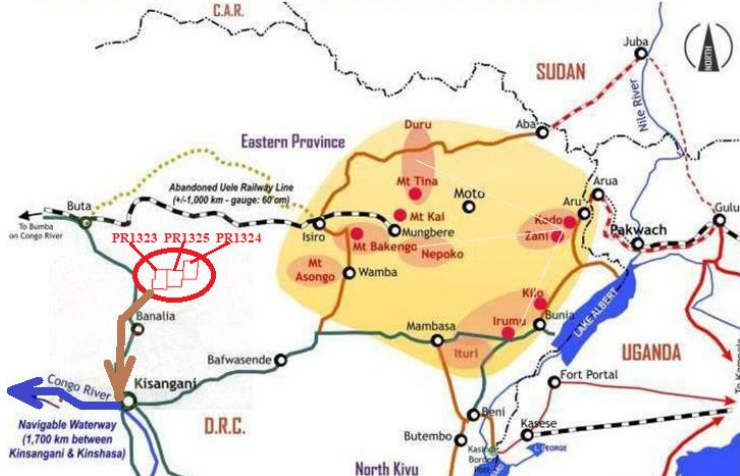


## DEVELOPMENT OF THE IRON DEPOSIT

### 1. THE TECHNICAL-ECONOMIC ATTRACTIVENESS

- Iron deposit evaluated at more than 1bt@65%Fe Cf <http://thaurfin.com/Iron-deposit.pdf>
- The closest iron deposit to the Congo River

### Iron Ore Reserves in North-Eastern DRC



- River transport between Kisangani and Kinshasa is essential
- Will supply the future steel industry by DRI of Kisangani
- Will finance the exploitation of methane gas from Lake Kivu via a 600km of gas pipeline
- Will participate in the financing of a dam of 2000MW upstream of Kisangani
- Will participate in making profitable the new deep water port of Banana

**The export of 50Mt per year will generate a turnover of 5bEuros/year at 100Euros/ton ore@65%Fe**

River transport is known to be an economical transport, a solution is proposed to overcome two difficulties, load breaks and navigation on an unmarked river.

- On individual barges each carrying an ore wagon, no break in load.
- The barges form a convoy of hundreds units
- The barges are coupled to each other at the couplings of the wagons which remain coupled
- Each barge is attached to its neighbor by cylinders which impose the angle of rotation
- The pivot angle is minimal because it is distributed and thanks to the wide bends in the river
- The inter-barge space is watertight and the submerged surface is continuous to minimize frictional resistance, wave resistance is negligible given the length of the convoys.
- An air cushion reduces the coefficient of friction on the largest submerged surface
- The perfect horizontality required by this cushion is ensured by software-controlled actuators.
- The convoy perfectly follows a defined route, piloted by satellite and software which
  - Drives the cylinders, imposing the angle of rotation of one barge relative to the other
  - Controls the power and direction of propulsion

**A study is needed to define the parameters of this original river transport in order to minimize its cost and optimize its efficiency.**

## DEVELOPMENT OF THE GOLD DEPOSIT

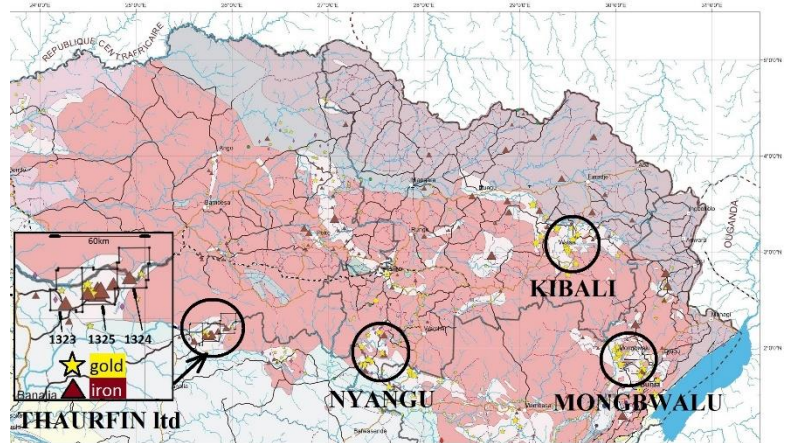
Prospecting for gold will make it possible to convert research permits with a short period of validity into exploitation permits with a long period of validity. Their exploitation will make it possible to finance the prospecting of gold and itabirites as well as other expenses.

Alluvial gold was exploited during the colony, before 1960, by 4 colonial companies. At that time, most prospectors dealt with alluvium and quartz veins and ignored the disseminated gold which are now the most attractive deposits. They occur in chemically reactive rocks.

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.



It is then reasonable to think that the gold reserves on the 3 polygons of 1200km<sup>2</sup> are greater than 2MOz



