ETHIOPIA/EGYPT/SUDAN/ITALY

Secrets of the dam builder

Sudan has now thrown its weight behind the Millennium Dam, at a time when curiosity about the contractor, Salini, was already growing

s Egyptian, Ethiopian and Sudanese ministers sat down to discuss the Grand Ethiopian Renaissance Dam on 9 December, one item was notably absent from the agenda. The role of Salini Costruttori SpA, the company which was awarded the contract without competitive tender, remains the subject of much speculation and mystery (AC Vol 54 No 22). While the three governments work out how to implement the recommendations of the still-secret report on the GERD by the International Panel of Experts, concern is being expressed about the veil of confidentiality surrounding the Italian company's involvement.

The state-owned Ethiopian Electric Power Corporation awarded the contract to Salini on 30 December 2010 and, unusually, that covered investigations, feasibility studies, basic design, final design and documentation as well as supervision of the construction. Salini, which this month merged with Impregilo SpA, has as a result, 'clear conflicts of interest', says a United Statesbased Ethiopian hydrologist who is undertaking an independent unofficial

investigation of the relationship between EEPCo and *Salini*, a company Addis Ababa governments have worked with since 1967. Like all unnamed experts attributed in this story, the hydrologist spoke on condition of anonymity.

RESULTS UNDER WRAPS

The government's own (secret) environmental impact assessment of the GERD is 'very deficient,' according to another US-based expert familiar with the report. That Salini's own research is also secret has also become a cause for concern for many. Normally, EIAs are carried out independently of the firms implementing the works in question and unless there is public scrutiny, objective assessments of the local and downstream impacts cannot be made.

So long as the Ethiopian state is using its own finance, how it commissions public works is nobody else's business. Yet it is in apparent contravention of the federal public procurement directive of its own Ministry of Finance and Economic Development. This says that in any procurement made through bidding, no

fewer than three candidates, if possible, should be selected from the suppliers' list, with the successful supplier 'selected on best price basis,' though in certain circumstances, public bodies may 'carry out single source procurement' for small objects. When acquiring objects of 'national strategic significance', there should still be a process of preparing bidding documents, evaluating bids, endorsing them and administering procurement contracts, says the directive. Salini's deal would appear to be outside all these provisions.

Although the World Bank has not been involved in financing the GERD or other Ethiopian dams, it maintains a historic interest and an engagement with the Ethiopian government. A former World Bank Country Director for Ethiopia and Sudan, Ishac Diwan, told Africa Confidential that the late Ethiopian Prime Minister Meles Zenawi had in 2003 asked him to discuss with Egypt's energy and finance ministers Cairo's potential interest in investing in the dam and contracting to buy power (AC Vol 50 No 2). Nile-dependent Egypt was positive and a period of rapprochement between the two countries followed, before Egypt turned against the scheme in 2009-11 (AC Vol 54 No 22).

The Bank even invested in connecting Ethiopia's and Sudan's electricity grids. Diwan, who now teaches at Harvard's Kennedy School of Government, USA, also recalls Meles in late 2004 'thinking a lot' about the site of the dam. He considered four options, at various elevations and with different mixes of irrigation and power generation. His 'decision to take the option closest to the Sudanese border, meaning only electricity and no irrigation, was seen as a big overture to Egypt and a commitment to cooperative behaviour and, in retrospect, a daring move,' says Diwan.

The Bank also maintains a watching brief. It commissioned a report from Marc Jeuland from the USA's Duke University and Dale Whittington from Britain's Manchester Business School, examining the economic effects of the GERD as a comparative study with Sudan's new Merowe Dam on the main Nile and the old Roseires Dam on the Blue Nile (Abay). Roseires suffers sedimentation problems that have reduced the capacity of its reservoir.

CASCADE OPTION

One specialist who has seen the confidential report says it was the first economic analysis of the GERD. It ran models for the operation of the dam on its own and with Roseires, Merowe (Hamdab) and Egypt's Aswan High Dam, and concluded that it was inadvisable to build a dam of the GERD's large

SALINI LOOKS TO EXPAND

Salini has merged with a Milan-based multinational construction competitor. A Salini statement said that a September Extraordinary Shareholders' Meeting of Impregilo SpA, a 1.9 billion euro (US\$2.6 bn.) construction company listed on the Milan Stock Exchange, had approved a merger with Salini to be finalised by end of this year. Salini has an 89.95% stake in the joint enterprise. The merger follows an acrimonious proxy battle in which investors led by Salini ousted Impregilo's Board.

Salini was able to bring in as reinforcements the New York-based 'event-driven' hedge fund Amber Capital LP, a minority shareholder in *Impregilo* that took an activist position in the midst of an old-fashioned Italian battle between two families dominating their own companies. Allegations followed, rejected by the Civil Court of Milan in January, of a hidden shareholder pact between *Salini* and Amber to win control of *Impregilo*. Two months later, **Pietro Salini**, founder of *Salini* and Chief Executive Officer of *Salini-Impregilo* SpA, began to tell the press that one strategic option would be to re-list *Impregilo* in London if *Salini* succeeded in the bid. If *Salini* issues shares, far greater transparency in its commercial operations will be required, possibly shedding light on its arrangements with the government of **Ethiopia**.

Shareholders have appointed several new, independent members of the merged company's Board of Directors. They are Nicola Greco, the former CEO of another company involved in Africa, Technip Italy SpA; Giacomo Marazzi, the ex-Chairman of Italian banking group *Cariparma* SpA; and Franco Passacantando, a World Bank Group Executive Director from 1995 to 2003. He will join *Salini-Impregilo*'s Control and Risks Committee this month after terminating his position as Managing Director of the central bank, the *Banca d'Italia*. Before the merger, *Salini* earned 23% of its near €2bn. total operating income last year in Ethiopia, expecting advances to suppliers to reach €24 million, says its 2012 annual report. *Salini-Impregilo* and EEPCo didn't respond to emailed requests for comment and Amber Capital couldn't be reached. ●

capacity, 6,000 megawatts. Jeuland and Whittington propose returning to 'cascade dams' or a series of five dams one after the other on the tributaries of the Abay, the expert said. He believes, with the report's authors, that cascade dams circumvent the severe problem of deciding at what rate to fill the GERD reservoir. Cascade dams with smaller reservoirs would not risk restricting the water of downstream countries.

AC has reviewed a private Salini presentation PowerPoint labelled 'Project 5000' on the 'Basic Design of the GERD', dated 16 November 2010. This throws further light on the project by showing that Salini did not take into account different discount rates and energy prices, notes an expert who assisted AC in analysing it. In a section labelled 'Downstream effects,' Salini notes that the short-term impact 'only during reservoir impounding' will be 'reduced energy generation in downstream plants' and 'reduced water availability in downstream countries.' This is at odds with Ethiopia's public position that the dam will be good for all without exception. It suggests that in talks with Sudan and Egypt, Premier Hailemariam Desalegn's government has not yet settled the thorny issue of how fast to fill the reservoir. Egypt in particular is unlikely to react positively to the notion of putting up with less water than it expected and which it believes it has a right to.

According to the presentation, which may have been overtaken by later plans, the start of impounding (filling the reservoir) was intended to be July 2013 and that would last until November 2015. 'Residual filling in two or three seasons' would depend on 'actual wet season runoffs; actual amount of energy generation needed; coordination with downstream users,' it notes. Such coordination would depend on meetings of the Ethiopian, Egyptian, and Sudanese water ministers but we understand that the three governments are not yet ready for such detailed planning. Moreover, after the initial impounding period, says the expert, Ethiopia would need additional impoundment to fill the reservoir.

DISPLACEMENT

The upstream effects 'will be negligible' since 'there are no villages in the reservoir area,' notes the PowerPoint. 'There are some scattered fishermen's huts only along the river (approximately 800 people). These huts will have to be moved a short distance to the banks of the reservoir.' The presentation goes on, 'There is no organised fishing activity' and the 'only cultivated areas are found at the extremity of the reservoir area'. To other experts, these claims demonstrate

the unreliability of *Salini*'s preparatory work. One expert labelled the assertions as 'bizarre'.

Salini sub-contracted the GERD design to Rome-based consulting engineers Studio Pietrangeli, a relationship that reaches back to building the Legedadi Dam on the Sendafa River to supply water for Addis Ababa in 1967, Salini's first dam contract with Ethiopia. Studio Pietrangeli, which didn't respond to emailed requests for comment, says on its website that it is 'responsible for the engineering of several important works,' including Gibe III and the GERD, 'two record-breaking projects under construction'. Gibe III is the subject of controversy in regard to Lake Turkana (AC Vol 54 No 25 Online).

DISPUTES WITH ADDIS

The relationship between Salini and Addis Ababa has had many ups and downs. It saw a series of disputes over water projects, one going back to 1996. A dispute over Salini's tenth contract for a raw water sewage reservoir was in 2001 referred to the Paris-headquartered International Court of Arbitration, in which the Addis Ababa Water and Sewage Authority sought compensation from Salini. Yet in 2003, EEPCo awarded Salini the Gibe II contract, a 25-kilometre tunnel that generates power by taking advantage of the drop between the basin created by the Gilgel Gibe I dam on the Gilgel Gibe River and the Omo River.

After delays held up the opening of the project until January 2010, nearly half of the whole tunnel's length reportedly collapsed, necessitating another ten months of repair and eventual opening in December 2010. The government's faith in *Salini* seems undimmed, however, and after Gibe II, EEPCo proceeded to contract the company four more times, including for Gibe III in 2006 and most recently, for all stages of the GERD.

'Most alarming of these recent contracts,' says the Ethiopian hydrologist, 'is that not only the Gibe II, III and the GERD were given to *Salini* with no bid but *Salini* was contracted the role of investigations, feasibility study, basic design, final design and documentation, as well as supervision of construction for all three projects. This is at the root of an "exaggerated sizing" of the plant at 6,000 MW for the GERD.' This represents a 300% error in the design capacity of the Dam, he says, echoing the criticism of other scientists who doubt that such high output is either realistically achievable or desirable.

In an interview in his office before the three-country ministerial meetings, the Egyptian Water and Irrigation Ministry Spokesman Khaled Wassif would not be drawn on Salini, saying its selection was 'something internally for the Ethiopians'. Before considering the company's qualification for the contract, 'we still need to look at the design,' he said. 'We don't mind about the reputation of the company as a prime issue.' Yet in later contacts, Wassif was less eager to discuss the dam, indicating that the nitty-gritty of tripartite negotiations may be proving complex and potentially diplomatically challenging.

SHORING UP REGIONAL SUPPORT

After a period of defiant independence, Addis Ababa has now, belatedly perhaps, built strong diplomatic support behind the Grand Ethiopian Renaissance Dam. Before the joint meeting of the Ethiopian, Sudanese and Egyptian water ministers and top officials in Khartoum on 9 December to discuss the GERD, Ethiopian Prime Minister Hailemariam Desalegn had prepared the ground with a photo opportunity with Sudan's President Omer Hassan Ahmed el Beshir. Just five days beforehand, they met at the Merowe Dam on the Nile. They also officially opened a 320 megawatt transmission line from Ethiopia to Sudan at El Gedaref near the Ethiopian border and certified other cooperation and trade agreements.

Addis Ababa has several political reasons for seeking closer relations with Sudan, of which the dam is but one, albeit it a very important one. Ethiopia tries to use Sudan against Eritrea (Asmara does the opposite but is weaker) and this helps to explain Hailemariam's outspoken position against the International Criminal Court's prosecution of Kenyan President Uhuru Kenyatta and its attempt to try Field Marshal Omer for genocide.

Hailemariam's love-in with Omer el Beshir has helped to isolate Egypt, encouraging it to accommodate Ethiopian plans for the dam. Egypt, however, is vastly more powerful than Sudan and, although it will regret losing Khartoum as a traditional ally on matters of the Nile, it has little room for compromise on the river it regards as its life blood.

For instance, the preamble to Egypt's new draft constitution opens: 'Egypt is the gift of the Nile and the gift of Egyptians to humanity'. Egypt already uses the full share of Nile waters allocated to it under the colonial-era treaty of 1929 and the post-colonial 1959 agreement. It will therefore take a great deal to pressure Egypt into accepting anything untoward, such as a relatively rapid period to fill the GERD reservoir, which would reduce flows and thus Egypt's irrigation water and electricity output from the Aswan Dam. The possibility of Egypt investing in the GERD, however, could change that picture.