



# EXPANDING THE SUEZ CANAL

## EGYPT'S EPISODE OF DOING THE UNDOABLE

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Expansion of the Suez Canal (SC), which started in August 2014, to be completed just a year later, has a global standing as one of the world's great mega-projects. Four years after completion of the scheme, the Suez Canal Authority (SCA) can now reflect on the benefits developed for world trade, as well as the success of the financial model developed for funding the US\$12 billion project.

Established in 1956, the SCA is an autonomous public authority of a juristic character. It reports directly to Egypt's Prime Minister and is empowered to administer the Canal's affairs independently without being restricted to the laws and the systems of the government. SCA issues and enforces all regulations necessary for safe and smooth navigation, with an independent budget governed by commercial project regulations.

### TECHNICAL FACTS

SC (In Arabic: Qanat as-Suways ), is an artificial waterway running from north to south across the Isthmus of Suez in Egypt to connect the Mediterranean Sea and the Red

Sea. Providing a maritime shortcut between Europe and the Indian and Western Pacific regions, the SC is the world's longest lock-free canal and most heavily navigated waterway, providing passage for 10% of world trade. Navigating through the Suez Canal means less time, fuel consumption and ship operating costs since it is the shortest route between East and West with 23%- 88% savings in distance and zero frequency of accidents.

Tolls paid by vessels using the canal are an important source of income for Egypt. Almost USD92 billion of national income has been generated by the canal during the last 40 years. Following are some further facts on the SC:

- With a permissible draft of 20m (66ft), the SC is large enough to provide safe passage for 100% of the world's container fleet, 92% of the global bulk carrier fleet and 62% of the world's tankers.
- The SC operates 24/7 navigation with a Vessel Traffic Management System in use
- Navigational aids (light & reflecting

buoys) are available for night traffic

- The extreme tidal range is 65cm in the north and 1.9m in the south.
- Canal banks are protected by rock revetments and steel sheet piling corresponding to the nature of soil in each area.
- Bollards are located on both sides of the Canal at 125m intervals for emergency mooring
- On both sides of the Canal, kilometric sign posts help locate ships in the waterway

### FLEXIBLE MARKETING

In a savvy move, SCA decided last year to reduce port dues, berthing and pilot charges for vessels and tankers calling at SC-Zone ports, particularly at East Port-Said. Container ships carrying more than 50 transit containers (loading and discharging) destined for any SC-Zone port will receive a discount calculated on the basis of the number of containers carried, at a maximum of 60%.

Vessels carrying less than 80000 tonnes can attract a 30% discount while ships with

more than 80000 tonnes can receive a 40% discount. Use of tugboats and mooring units at East Port-Said is calculated per hour, which starts when the tugboat approaches the vessel's side until the manoeuvre ends and the tugboat leaves the vessel. Any fraction of an hour is considered a full hour.

SCA always responds positively to changes in global economic conditions that impact the world shipping market. So, SCA decided in Feb 2019 that the rebate granted to dry bulk vessels operating between American and Asian ports shall remain in force until the end of 2019 (the last permissible sailing date from port of origin is 31 December 2019).

### SC EXPANSION PROJECT

The new extension has proven essential to enhance the canal's performance and hence maintain its global significance, particularly with regard to southbound convoys, which previously had to wait till northbound convoys passed through the waterway. SCA prepared technical designs, plans and time schedules for the expansion project since it was closely linked to the national project for SC-Zone development.

The methodology and timeframe set for the SC expansion project heralds a new era in the nature of the Egyptian state and state-community interaction. The state's role was pivotal and indispensable- demonstrating a model for developing countries in handling national mega-projects. A similar model was previously adopted by Japan, South Korea, China and some other South East Asian countries.

### EXPANSION OBJECTIVES

- Enhance Egypt's focal position in global trading routes, particularly after becoming a member of China's Belt and Road Initiative
- Increase daily average number of transiting vessels from 49 to 97 ships by 2023
- Increase Suez Canal revenue from US\$5.3 billion at present to US\$13.226 billion by 2023
- Create job opportunities for young people living at the Canal Zone, Sinai, and neighbouring areas
- Shorten transit time for the southbound convoy from 18 hours to 11 hours
- Reduce vessel waiting time from 8-11 hours to a maximum of three, thus cutting down shipping costs
- Attract more ships to use the Suez Canal and reinforce its standing as a key international route
- Achieve direct non-stop transit for 45 ships in the two directions

### PROJECT SNAPSHOTS

The total length of the Canal has reached 72 km, including the 35km of additional waterway dug parallel to the original canal (to a depth of

24m and a width of 320 m to achieve the 20m draught). The western bypasses in the Great Bitter Lakes area and the Al-Ballah western bypass have been upgraded to reach 27km and 10km in length respectively.

Dredging works removed 250 million m<sup>3</sup> of soil at a cost of EGP 15 billion (US\$865.5 million) while dry excavation carried out by the Engineering Authority of the Armed Forces removed 250 million m<sup>3</sup> costing EGP 4 billion (US\$230.8 million). Around 30 km of old revetments and sheet piles were replaced with new canal bank construction totalling 100 km in length, at an estimated cost of EGP 500 million (US\$29 million). Some 131 task teams from both public and private enterprises carried out the rehabilitation work, with an average rate of progress of up to 1500 linear metres per day.

This mega project sets a paradigm for Arab-international cooperation. At the peak of construction, six of the world's leading dredging companies operated 45 dredgers, representing 75% of the global dredging fleet. Around 20 sedimentation basins were formed with 80 contractors on site. Everything was finished in a stunning time of 12 months, despite previous studies which had said at least three years would be needed to complete the project. Furthermore, three tunnels have now been opened below the Canal, in Ismailia at the 72km mark- two for auto traffic and one for rail transport- while in Port-Said, two more tunnels were dug: one for auto traffic at the 17km mark and another one for rail at the 52.5 km mark.

### NOVEL FINANCE

Around US\$12.2 billion was raised to finance construction of the Suez Canal Extension and the new tunnels beneath it, through a mechanism hailed as truly innovative by banking experts. Certificates of bank deposits were used as the financial tool used for pumping money into the burgeoning project. Hence, the funding was based on real sources, with no inflationary pressures on the Egyptian economy compared to other traditional means of finance. The general level of economic liquidity has not reduced as funding came from genuine savings, particularly those of the private sector. Also, much confidence has been generated in the banking system since financiers (Egyptians) have obtained savings certificates issued from Egyptian banks for their contribution to the project.

In this way, the Canal Expansion has underlined the importance of local funding for national development projects. Due to the special nature of the project, it was essential to seek domestic channels of finance, given the high level of credibility the expansion scheme has in the hearts and minds of Egyptians. Thus, the expanded Canal, which

raised a return on its construction costs of EGP 20 billion (US\$1.15 billion) in less than one year of operation, has shown that the civilian population is willing to rearrange its savings in favour of development, so use of local funding could be viable as the means for funding further national projects.

Political will has been freed from the pressures usually exerted by international creditors in foreign loan applications. To the contrary, financiers have nothing to do with the project management as they merely receive savings certificates with fixed returns and there are no concessions or debt that could affect the project against fund allocation. Politically, Egypt has gained credence as an influential regional power and hopes are high for even better performance both regionally and globally.

### SUEZ CANAL TRAFFIC FOR FISCAL YEAR 2017/2018

1. Vessels: 17,860
2. Net tonnage: 1,092.8 million
3. Cargo tonnage: 942.4 million
4. North to south cargo tonnage: 524.6 million (calendar year)
5. South to north cargo tonnage: 458.8 million (calendar year)

### ABOUT THE AUTHOR

Ashraf Ghazy holds a Master's Degree in International Transport & Logistics from the International Transport & Logistics Institute of the Arab Academy. Mr Ghazy moved to Damietta Port Authority (DPA) in 1994, and after 24 years in port-related activities, he is now a senior translator in DPA's Information Technology Department. Mr Ghazy has written extensively in the global maritime media, and is an often-sourced commentator on the maritime issues affecting Egypt and the Suez Canal.

### ABOUT THE ORGANIZATION

The Port of Damietta is a government-run Egyptian port. It is 10.5kms west of the River Nile Estuary, and 70km west of Port Said. Access is via a manmade entrance channel from the north, and the total space of the Port of Damietta is 11.6 million square metres. It handles containers, general cargo and bulk commodities. Several private companies are operating successfully in the port, including significant joint venture gas liquefaction complexes.

### ENQUIRIES

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