



1. Project Data

Project ID P101201	Project Name EG-Cairo Airport Development Project-TB2	
Country Egypt, Arab Republic of	Practice Area(Lead) Transport & ICT	
L/C/TF Number(s) IBRD-78510	Closing Date (Original) 30-Nov-2015	Total Project Cost (USD) 436,000,000.00
Bank Approval Date 23-Feb-2010	Closing Date (Actual) 30-Nov-2016	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	280,000,000.00	0.00
Revised Commitment	249,976,947.18	0.00
Actual	249,976,947.18	0.00

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2. Project Objectives and Components

a. Objectives

Original Objective:

The original Project Development Objective (PDO) as stated in both the Project Appraisal Document (PAD) (page 5) and the Loan Agreement (page 6) was to assist the Government of Egypt (GoE) to (i) enhance the quality of airport services through an increase in capacity of Cairo International Airport (CIA); and (ii) to strengthen air transport in Egypt.

Revised Objective:

To assist the GoE to (i) enhance the capacity and the quality of services of Cairo International Airport and (ii) improve the capacity of key stakeholders Ministry of Civil Aviation (MoCA) and Egypt Holding Company for



Airports (EHCAAN) in the strategic planning of the air transport sector.

The PDO was amended through project restructuring in June 2014. The change did not affect the substance of the objectives, but clarified the PDO in two ways. First, it corrected the imprecise framing of the original PDO that implied that improved quality could result from increased capacity. Second, it improved the PDO wording to better link with the project-supported activities with more specific outcomes. As the components and outcomes remained unchanged a split evaluation was inappropriate.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project had two main components: the first focused on the civil works and the second on technical assistance (TA) activities, as summarized in Table 1. No components were revised during project implementation.

Table 1. Project Components of the Cairo Airport Development Project

Category	Description	Amounts Allocated
Component 1: Rehabilitation and Expansion of the Terminal Building 2 (TB2) at Cairo International Airport	Rehabilitation and expansion of the existing TB2 terminal including a check-in hall, passenger waiting areas, gates, customs, baggage claim, information technology systems, a new pier with connecting bridges, and a new apron with both contact and remote aircraft parking stands. After rehabilitation and expansion, the new terminal would have a capacity of 7.5 m passengers per annum.	IBRD financing: US\$263 million; (actual at completion US\$249.98 million) Egypt Holding Company for Airports and Air Navigation (EHCAAN) financing: US\$148 million; (actual at completion US\$198.79 million)
Component 2: Technical Assistance and Studies	The original five subcomponents were as follows: <ul style="list-style-type: none"> • Subcomponent 2.1: Review of the Air Transport Policy of Egypt and Strategic Options • Subcomponent 2.2: Development Strategy of Air Traffic Control and Air Traffic Management 	IBRD financing: US\$2.8 million; ECHAAN nil;(actual at completion IBRD US\$1.76 million; ECHAAN US\$0.31 million)



	<ul style="list-style-type: none"> • Subcomponent 2.3: Review of Civil Aviation Authority’s Compliance with ICAO Standards and Recommended Practices Concerning Regulatory Oversight of Safety and Security* • Subcomponent 2.4: Analysis of the Fee and Tax Structure of the Air Transport Sector • Subcomponent 2.5: Spatial Planning of Cairo’s Airport Area 	
Other	Physical and Financial Contingencies	IBRD financing: US\$14 million; EHCAAN: US\$ 8.30 million
	Front-end fee	EHCAAN financing: US\$0.7 million

* Note: This study was replaced with the Airport Excellence Review in Safety (APEX) implemented by Airports Council International.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: At approval, the total project cost was estimated at US\$436 million including contingencies. At closure the amount disbursed was US\$412.70 million.

Financing: US\$280 million was approved to finance the loan by IBRD and US\$156 million by Egypt Holding Company for Airports and Air Navigation (EHCAAN) - effectively the Borrower contribution. At closure US\$249.98 million was disbursed against the IBRD loan and US\$199.80 million of EHCAAN's planned contribution.

Dates: The project was approved on February 23, 2010 and scheduled to close on November 30, 2015. In the event the closing date was extended in two increments by 12 months to November 30, 2016 by means of two level 2 restructurings.

3. Relevance of Objectives & Design

a. Relevance of Objectives

At appraisal, Cairo International Airport (CAI) was already the second-busiest airport in Africa, aided by its geographical location at the crossroads of routes between Europe, Asia, and Africa. The airport had a total capacity of 21 million passengers per annum, two runways, and three terminal buildings, which were used by 58 passenger airlines, 10 cargo operators, as well as several charter operators. The air transport sector was and remains a key driver of the Arab Republic of Egypt’s economic growth as well as the country’s integration into the region and with the rest of the world.



Currently, an estimated 2.5 million jobs directly and indirectly depend on tourism in Egypt. Airports are the primary points of entry for international visitors. It is estimated that around 80 percent of tourist traffic flows through Egypt's airports, and tourism accounts for half of all international passenger traffic at CAI. The total contribution of the tourism and travel industry in 2016 was estimated to be 7.2 percent of Egypt's total GDP (World Travel and Tourism Council, Country Report for Egypt, 2017). The project strongly aligns with the Government of Egypt's (GoE) strategic objective of achieving high and sustainable GDP growth and the World Bank's objective of enhancing the provision of public services through improved efficiency of transport services. The Country Assistance Strategy for FY 06-09 and interim strategy FY 12-14 cited the close link between the expansion of airports and tourism development, as well as the challenge of attracting private foreign capital for large investments. The (post Arab Spring) World Bank Country Partnership Framework (CPF) FY15–19 reflects up-to-date priorities to support private sector job creation, social inclusion, and improve governance. In this context, for air transport, the World Bank Group seeks to scale up measures to attract further private sector investments. Enhancement of the capacity and efficiency of key transport infrastructure and services is needed to remove bottlenecks, which remain as constraints to tourism, trade, regional mobility, job creation, and service delivery.

The project's objectives were and remain highly relevant to the GoE's development priorities. Tourism continues to be a major driver of the Egyptian economy and a key part of the GoE's development strategy. It is a vital source of foreign currency reserves. As a catalytic investment, the project is expected to contribute to enhancing tourism competitiveness, a priority identified under the Economic Development and Culture pillars in the GoE Sustainable Development Strategy: Egypt's Vision for the Year 2030.

Rating

High

b. Relevance of Design

The underlying logic of the causal chain was clear. However, the original objective used in preparation and appraisal was not rigorously framed and the five original indicators were not well aligned to measure the objectives. This was recognized during implementation prior to tendering, and in the restructuring of 2014 led by a new TTL, a revised results framework was able to better link it to project activities. Five original outcome indicators were dropped as inadequate, since they were deemed not directly attributable to project activities. To measure the capacity objective, the original indicator: "passenger traffic at CAI" was restated as a core indicator for direct project beneficiaries, and a new indicator added: 'number of passengers that can be served through terminal building two (TB2) in one day'. The service quality objective was measured through the original indicators for 'passenger processing time in the new TB2' as well as a new indicator: "TB2 reaches level B of the IATA level of Service" hierarchy. Component 2 on improving the capacity of stakeholders in the strategic planning of the air transport sector was now to be measured through a new overriding indicator: 'implementation of the strategic recommendations of the five studies by MoCA and EHCAAN'. The new or revised outcome indicators were intended to more adequately capture and strengthen the project results. IEG believes the revisions were an appropriate improvement to the results framework, but



they could have been made earlier.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To enhance the capacity and the quality of services at Cairo International Airport.

Rationale

Although the PDO was amended, IEG agrees with the ICR (page 6) that a ‘split evaluation’ was unnecessary, as the revision of the PDO statement did not change the key outcomes, but rather clarified the logic and specificity of the objectives. At the time of restructuring, US\$62 million (26 percent) of the final loan amount had been disbursed. IEG's evaluation of efficacy is undertaken in accordance with the revised PDO and Results Framework with the improved wording.

The revised target for ‘annual passenger traffic at CAI’ (i.e. the whole airport) was fully achieved; however, passenger traffic was less than the 19.47 million passengers per annum (mppa) originally forecast. During the 2014 restructuring, this indicator was relabeled as ‘direct project beneficiaries’ (flight passengers) and a more conservative target of 15.3 mppa was set, because the Arab Spring disturbances resulted in a decline in passenger traffic. The revised target was exceeded (105 percent) as traffic had recovered to 2010 levels by 2016. ‘The percentage of female beneficiaries’ (passengers) was also added as an indicator in line with World Bank Group corporate requirements, but was not actively monitored during the project, which was considered gender neutral.

The capacity of TB2 has more than doubled from 3.5 mppa to 7.5 mppa, following the completion of the terminal works. After the 2014 restructuring, a new indicator, ‘number of passengers that can be served through TB2 in one day’, was added to show the project’s impact on capacity levels. The target of 20,000 passengers was calculated using the annual capacity of TB2 (7.5 million) divided by 365 days. Following the completion of the physical works, this indicator was achieved.

The original causal link in the PDO between increasing capacity and improving service quality (“enhance the quality of services through an increase in capacity”) was removed during the 2014 restructuring, recognizing that space was only one driver of service quality. The indicators for ‘passenger processing time (arriving and departing)’ remained unchanged under the revised Results Framework.

The indicator for ‘passenger processing time in the new TB2 (arriving)’ was recorded as 30 minutes for arriving passengers, just short of the target of 29 minutes, but was a distinct improvement over the baseline



of 37 minutes. The indicator for ‘passenger processing time in the new TB2 (departure area)’, however, recorded 66 minutes for departing passengers, nearly double the expected target of 36 minutes. Processing times were affected not only in Egypt, but worldwide by the more stringent security measures introduced as a result of the heightened threat of terrorism. An additional indicator measured service levels: TB2 was expected to achieve level B of the IATA levels of service hierarchy. After closure, TB2 awaited official verification, but was expected to fulfill the requirements for level B based on the terminal’s design specifications. Level B implies a high level of service with conditions of stable flow, very few delays, and high levels of comfort. Discussions with the TTL determined that the verification had been achieved.

Table 2: Objective 1 Indicators

PDO Indicator Outcomes	Baseline	Target	Actual at Completion	Achievement
Passenger traffic at CIA (millions)	14.21	15.30	16.14	Achieved (105%)
Passenger processing time at TB2 in minutes (departing)	45	36	66	Not achieved due to increased security needs
Passenger processing time at TB2 in minutes (arriving)	37	29	30	Mostly achieved
Number of passengers that can be served through TB2 in one day	9,590	20,000	20,000	Achieved (100%)
TB2 reached the level B of IATA level of service (Yes/No)	No	Yes	No	Not verified at the time of ICR, but TTL confirms reached shortly after project closure
PDO Indicator Outputs	Baseline	Target	Actual at Completion	Achievement
Physical completion of TB2	0	100	100	Achieved (100%)



A Passenger Satisfaction Survey for Terminal 2 carried out by the Cairo Airport Company is encouraging. For example, in TB2, 92 percent of surveyed passengers rated 'Good to Excellent' for 'ease of finding your way through airport', 84 percent rated 'Excellent to Good' for 'comfortable waiting/gate area', and 97 percent rated 'Good to Excellent' for 'cleanliness of airport terminal'. About 15 airlines and their passengers should benefit from the rehabilitated TB2. In full operation 15 airlines operate from TB2. These airlines previously operated from the aging TB1 during construction of TB2.

In terms of physical accomplishments some of the results were above and beyond the original plans, providing a substantial level of service for the users. The new terminal is 36 percent larger in surface area (228,000 m² up from 168,000 m²) with an improved layout and passenger flow. The number and variety of commercial and retail options have increased as the terminal has expanded the space allocated for rental retail areas (27,000 m²) and is operating with three duty-free concessionaires. The new design also offers 38 new check-in counters, 11 moving walkways, 14 departure gates including one to accommodate the Airbus A380, compared with the seven gates in the old terminal, and a premium lounge. An advanced baggage handling system with state-of-the-art baggage scanning and closed-circuit television has improved aviation security. The terminal also reflects advances in technology and evolving passenger needs through provision of electronic self-service kiosks, use of portable electronic devices, and Internet access. The new design also takes into account recommended practices for accessibility to better cater for passengers with restricted mobility.

Although passenger numbers were a little lower than originally planned and departure processing times were longer due to more stringent security measures, objective one was substantially achieved with a very good level of service.

Rating
Substantial

Objective 2
Objective

To improve the capacity of key stakeholders (MoCA and EHCAAN) in the strategic planning of the air transport sector.



Rationale

During the 2014 restructuring, the second part of the PDO was refined to better articulate institutional strengthening and clearly identify the targeted stakeholders (EHCAAN and MoCA). Five technical studies were financed by the project covering a range of topics (as detailed in Table 1, Section 2d). At project closing, all the studies had been completed and the implementation of the recommendations had exceeded targets. Overall implementation of the studies was assessed at 73 percent against a target of 60 percent. Evaluation was based on an equal weighting for completion of each study and for the implementation of its recommendations. For example, one of the studies, the Development Strategy of Air Traffic Control Infrastructure and Management, lays out a plan for 2011–2030 to optimize the Communications, Navigation, Surveillance (CNS) and ATC systems to provide adequate infrastructure to manage future growth in air traffic. The main recommendation was to upgrade CNS/ATC systems in seven airports across Egypt. As a result of the studies, at the time of project completion, two of the seven were being upgraded and the other five were in the procurement stage. The ultimate outcomes of these studies are a move towards modernized, safer, and more efficient ATC systems; easing of traffic congestion; and reduction of costly delays, thus contributing to reductions in fuel consumption and carbon emissions.

Table 3: Objective 2 Indicators

PDO Indicator Outcomes	Baseline	Target	Actual at Completion	Achievement
Implementation of strategic recommendations of five studies (%)	0	60	73	Achieved (122%)
PDO Indicator Outputs	Baseline	Target	Actual at Completion	Achievement
Completion of five studies	No	Yes	Yes	Achieved (100%)

Rating
Substantial

5. Efficiency

The economic efficiency of the project while less than estimated at appraisal still remains adequate according to World Bank Group guidelines. Based on the same methodology used at appraisal, four sources of benefits were considered for the economic analysis: (a) the net expenditure per additional tourist now able to visit Cairo, (b) the additional net expenditure by foreign visitors in airport shops, (c) the additional jobs created by construction and the increased activity at the airport, and (d) the time savings for passengers using CAI. The ex post economic evaluation yields a Net Present Value (NPV) of US\$116.4 million at a discount rate of 6



percent and an economic internal rate of return (EIRR) of 8.5 percent, compared with a NPV at appraisal of US\$415 million at a discount rate of 12 percent and an EIRR of 20.3 percent. The ex post economic evaluation is less favorable than at appraisal mainly because of lower than expected passenger traffic due to the events following the Arab Spring unrest. However, traffic is rebounding and is projected to grow at a more accelerated pace from now until the end of the evaluation period (2017–2035). Other factors that also contributed to the lower EIRRs and NPVs are the increase in project costs due to improvements to the terminal design as well as implementation delays. Despite these factors, the project remains economically viable and yields positive NPVs and an acceptable EIRR.

The results of the ex post financial evaluation are similar to those calculated at appraisal. The benefits stem from cash revenues generated by additional passengers. Taking into account the actual project costs, which include investment costs as well as operation and maintenance costs, the ex post financial internal rate of return (FIRR) of 14.5 percent and NPV of EGP 660.2 million (equivalent to US\$110.4 million) at 11 percent discount rate compare favorably to the FIRR of 15.7 percent and NPV of EGP 1,600 million (equivalent to US\$283.1 million) estimated at a discount rate of 8 percent at appraisal. Because the Cairo Airport Company's (CAC) revenues are in U.S. dollars, but their expenses are in Egyptian pounds, and taking into consideration the fluctuations of the Egyptian pound, benefits were generated resulting in sound financial results despite implementation delays, increases in the financing cost of the project, and cost overruns. The financial performance of CAC remained sound during the implementation period, maintaining a current ratio (i.e. current assets/current liabilities) of not less than 1.0 and a debt service coverage ratio of not less than 1.2, as recommended at appraisal.

An ongoing contractual dispute between CAC and the Contractor required substantial effort and time on the part of both the Borrower and the World Bank. This involved a disagreement between the Employer (CAC) and the Contractor on the correct application of the price adjustment formula in a General Conditions of Contract Sub-Clause. As recorded in project documents, this issue had been discussed since the end of 2013, with ongoing guidance, including workshops, offered by the World Bank. Given the failure to reach a resolution, the Contractor referred the issue to the project's Dispute Board (DB) in November 2016. The DB found that neither the Contractor's nor the Employer's application of the formula satisfied the intent of the clause to adjust the price as a result of the rise and fall in the cost of goods, labor, and other inputs to the works (the fluctuation formula). As part of the DB's decision in February 2017 (four months before project closure), it instructed the Employer to pay the Contractor US\$19.9 million plus €7.7 million for the amounts that were wrongly deducted from the Interim Payment Certificates (IPCs), plus the interest on the amount to be reimbursed. At the time of the Implementation Completion and Results Report (ICR), this issue remained unresolved with ongoing arbitration proceedings or pending an amicable solution. The TTL advised, however, that the matter was settled amicably without financial penalty.

Given the lower than planned returns however (both economic and financial) as well as scope changes leading to project delays, IEG assesses the efficiency rating as modest. Nonetheless, while the economic and financial returns are expected to be lower than anticipated they are still positive.

Efficiency Rating



Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	20.30	98.40 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	8.50	95.00 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The project's objectives were highly relevant to the country's development priorities and the design was substantially relevant following the 2014 restructuring. Both objectives were substantially achieved with only minor shortcomings, while efficiency was modest due to the lower than expected planned returns and the project delays.

Given the high relevance of objectives, substantial relevance of design (especially after amendment at restructuring), substantial achievement of both objectives and modest efficiency, the project is rated satisfactory.

a. Outcome Rating

Satisfactory

7. Rationale for Risk to Development Outcome Rating

Through the World Bank's engagement, the GoE had a greater awareness of the importance of ensuring the sustainability of investments through adequate operations and maintenance. A 24-month renewable management contract is currently in place for TB2 with a reputable international operator. The GoE has allocated resources as part of its business plan for maintenance of the facilities and service quality going forward. CAC's financial standing remains sound, as detailed in its financial evaluation (Annex 4 of the ICR). Strong Government commitment is expected to continue to advance the policy agenda. However, exogenous factors such as the volatile political and security climate remain the main risk to traffic demand and the country's attractiveness for tourism. For this reason IEG rates the risk as modest rather than low as rated by the ICR (page 17).

a. Risk to Development Outcome Rating



Modest

8. Assessment of Bank Performance

a. Quality-at-Entry

The project's preparation was overseen by the same Task Team Leader who had worked on the earlier Airports Development Project, which helped promote efficient collaboration. The team successfully proposed and negotiated the scope for the institutional component for the project. Quality at entry was significantly weakened, however, by shortcomings on the technical aspects of the civil works during preparation. Given that CAC funded the design and supervision contract separately with their own funds, the World Bank had less leverage and technical influence in the early stages. During preparation, the joint venture of engineering firms hired by CAC did not complete detailed site surveys or integrate them into the terminal design. The scope of the project also changed due to the need to fully demolish and reconstruct the terminal. This meant that the design had to be revised during implementation, which had significant cost and time implications. The M&E framework designed at appraisal also had shortcomings in that the wording was imprecise and five indicators were poorly linked to project activities. Given the above a rating of moderately unsatisfactory is appropriate.

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The World Bank team was flexible to changes in circumstances during implementation. Although the scope of the project changed due to the need to fully demolish and reconstruct the terminal, additional financing was not required to cover the cost increase, as there were sufficient uncommitted funds in the IBRD loan given that the Contractor's bid was below the project cost estimated at appraisal and foreign expenditures, which were covered by the World Bank, were less than estimated. Overall capacity of the terminal did not increase, but improvements included more space for commercial areas and operational aspects such as enhanced passenger flow and baggage circulation. Attempts to introduce more 'green' elements to the design and improve the sustainability of the terminal did not gain much traction for reasons not explained in the ICR, in spite of the World Bank's apparent continued efforts.

The team was strengthened by the inclusion of a technical consultant with expertise in the air transport sector. He had supported the design of the TA component and participated in every supervision mission as part of the World Bank team. On average, two fully-fledged supervision missions were conducted per year. The project leveraged locally based World Bank staff to maintain engagement with stakeholders and foster communications. Interim supervision missions were conducted toward the latter stages of implementation to minimize further delay. Additional guidance was also provided during implementation, when needed, through the organization of workshops and the deployment of World Bank specialists (for example, procurement, financial management, safeguards, and air transport). The World Bank was proactive in recognizing the need



to improve the PDO and Results Framework, which led to restructuring in 2014, while also fostering capacity building and encouraging the project management unit (PMU) to take ownership (for example, of M&E). Over the course of the project, the team was able to maintain a candid dialogue with the implementing agency team to address various issues (such as the possible partial opening of the terminal and the opportunity to proceed with a management contract). The World Bank's advocacy succeeded in bringing private sector experience in this project as EHCAAN contracted an international airport operator to assist during the opening phase and to manage the new TB2 for two years. Overall, supervision was satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Government fully recognized that tourism was a major driver of the Egyptian economy and a crucial part of its development strategy, especially as it is a vital source of foreign currency. It was therefore supportive of the project and facilitated it strongly during preparation. However, communication was sometimes less effective. In September 2011, the GoE opened a seasonal terminal to ease overall congestion at CAI. The decision to open the terminal was not known to the World Bank team at appraisal, but subsequently had a positive impact on the ex post economic evaluation of the project; the terminal was opened specifically to handle pilgrimage (Hajj and Umrah) traffic and Egyptair's flights to/from Medina and Jeddah.

Although the World Bank hired a consultant with extensive sector experience to review the preliminary design before project approval, and although conducting detailed site surveys was a key recommendation of his review, intense pressure was applied to proceed with construction and the loan was tendered before sufficient due diligence had been undertaken.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

The project benefited from a strong PMU and supportive management within the implementing agency. The implementation arrangements under the previous Airport Development Project (ADP) had proved to be effective and were retained for this project. The PMU established under the ADP, with a majority of its original staff, remained in place, which ensured stability and strengthening of institutional knowledge. The perseverance of the PMU under challenging conditions of political and institutional turmoil is noteworthy. It also contributed to a high turnover in the project leadership. Over the course of the project, there were nine different EHCAAN chairmen and ten different CAC chairmen. This resulted in some delays in decision



making, but overall support for the project remained strong. Nevertheless, swifter action should have been taken in response to nonperformance of the Engineer to prevent the project from suffering. The Engineer for this project was financed and selected by the GoE before the World Bank Group loan became effective. The World Bank subsequently played an important role in advising the GoE, and the Engineer was eventually replaced in September 2014, after a one-year selection process and four years into implementation.

During project implementation, the Contractor performed poorly on Health, Safety and Environment (HSE) aspects (for example, on-site health and safety, insufficient number of safety operators, lack of equipment such as water dispensers, latrines, and so on). One accident resulted in a fatality. HSE implementation was exacerbated by poor enforcement by the Engineer/design consultant despite several World Bank reminders during supervision mission.

Complaints from subcontractors over late or non-payment added to concerns over the timely completion of the project. An amendment to the contract was signed on May 26, 2016, to release a part of the retention money to the Contractor against a bank guarantee, to ease the financial situation of the Contractor. The World Bank recommended that the Employer increase the frequency of payment to the Contractor by issuing IPCs every two weeks instead of every month to ensure that the Contractor could pay the subcontractors on time, which was critical for the progress of the project.

A private management contract for TB2 was concluded in 2016 with a reputable international airport operator. The World Bank commended the GoE's selection and appointment of a terminal operator. Although the operator's scope of work was limited only to Terminal 2 and did not cover the whole airport, it was considered essential for the delivery of a successful "Operational Readiness and Airport Transfer" for the terminal. The operator's team came on board in March 2016. The terminal began some operations in September 2016 and full operations by mid-February 2017.

Overall, the shortcomings were not sufficiently substantive to seriously hinder the final outcome and the conclusion of the private management contract was a positive step forward.

Implementing Agency Performance Rating

Moderately Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E framework designed at appraisal had some shortcomings in that the wording was imprecise and five indicators were poorly linked to project activities. This was corrected in the 2014 restructuring, but these issues could have been addressed earlier. The original Results Framework consisted of seven outcome



indicators, which covered both components. There were six intermediate indicators, and they remained unchanged throughout the project.

b. M&E Implementation

The 2014 restructuring revised the Results Framework to better link it to project activities. Five original outcome indicators were dropped, as they were deemed not directly attributable to project activities. To measure the capacity objective, the original indicator for 'passenger traffic at CAI' was restated as a core indicator for direct project beneficiaries, and a new indicator was added for 'number of passengers that can be served through TB2 in one day'. The service quality objective was measured through the original indicators for 'passenger processing time in the new TB2 (arriving/departing)' and a new indicator: 'TB2 reaches the level B of IATA level of Service'. Component 2 on improving the capacity of stakeholders in the strategic planning of the air transport sector was measured through a new comprehensive indicator, 'implementation of the strategic recommendations of the five studies by MoCA and EHCAAN'. Effective systems were put in place and indicators were systematically monitored by the PMU through a dedicated M&E Specialist who took ownership of data collection and quality control.

In summary, following the restructuring, the PDO was clarified and the second objective related to institutional strengthening was more clearly defined. Four of the original PDO-level indicators were dropped, since they were not directly attributable to the project activities, but four new indicators were added to better measure project outcomes on capacity and service levels. Data collection for all indicators was satisfactory.

c. M&E Utilization

The information collected was useful in assessing the progress on project implementation and in informing EHCAAN on strategic decisions and operations. Indicators from the project continue to be monitored after project closure. Outside the Results Framework, Passenger Satisfaction Surveys and data collected by other Government ministries (such as passenger data) also provided useful insights for operational purposes.

Although initially weak, the revisions in 2014 led to a robust, measurable results framework that continued after project closure.

M&E Quality Rating

Substantial

11. Other Issues

a. Safeguards

Environmental and social safeguards. The project was classified as environmental Category B and did not



entail any land acquisition or resettlement. The only safeguard policy triggered by the project was OP 4.01: Environmental Assessment. An Environmental and Social Impact Assessment (ESIA) was prepared by an Egyptian consulting firm hired by CAC and publicly disclosed. Public consultations were held in respect of the project and efforts were made to encourage a balanced representation of stakeholders. The issues raised during the public consultations were primarily around the possible impacts of the project by noise and air quality both at the airport and in surrounding communities. These concerns were addressed by the ESIA consultant. The project was able to reap the benefits of investing in capacity building in the form of the environmental unit that was established within CAC, which monitored the implementation of the ESIA for the project. Monitoring systems were put in place to monitor noise and air quality. There were some concerns during implementation with safety on site and health, safety and environmental compliance, which was addressed through corrective actions and strong supervision of the Contractor. Attempts to introduce more 'green' elements to the design and improve the sustainability of the terminal did not gain much traction, in spite of the World Bank's continued efforts.

b. Fiduciary Compliance

Financial management. The project maintained sound financial management (FM) arrangements and complied with reporting and accounting requirements stated in the Loan Agreement. The PMU had knowledge and experience of fiduciary aspects related to the project and brought a history of timely audit report submissions to the World Bank Group. FM was rated Satisfactory in the last Implementation Status and Results Report (ISR).

Procurement. There were no instances of misprocurement in the project and the Procurement Plan was kept up-to-date. The construction contract was amended four times. Some key lessons from the Airports Development Project (ADP) were taken into account in the design. For example, under the ADP, two separate contracts were issued for the works and the ITS, which proved difficult to manage including coordination of works, the handover process, and identification of delays or dysfunctions. Given the integrated nature of the facilities, the decision was taken on this project to procure all works, including the supply and installation of the ITS, in a single main contract. Overall, the project was designed to ensure compatibility in operations between TB3 and TB2. The team was reasonably well staffed to handle procurement issues and benefitted from experience on the project. Procurement was rated Satisfactory in the last Implementation Supervision Report.

c. Unintended impacts (Positive or Negative)

d. Other

None



12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Negligible	Modest	Exogenous factors such as the volatile political and security climate pose a risk to traffic demand.
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance		Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

To the extent the World Bank is involved in the preliminary design stage, it should play an active role in advising on the need for and scope of related studies. It should also ensure a rigorous review of the design and the contract before it is tendered.

To ensure better compliance with HSE aspects, responsibilities and consequences of HSE violations need to be clearly defined in the tender and contract documents. Part of the challenge with the project was to elevate Egyptian standards to internationally accepted, World Bank standards. The World Bank can help its clients by advising on provisions for HSE breaches in contracts, particularly related to fines and penalties.

The management and operations of airport terminals can be greatly enhanced through private participation in the form of a management contract. Given the challenging political and investment climate, the management contract for TB2 can be considered a favorable outcome, particularly in a country with minimal history of private engagement in the sector. It is, however, considered good practice to have the same operator manage the entire airport for seamless integration across terminals and to ensure that operational efficiencies are gained.

Greater clarity needs to be provided on the application of a price adjustment formula. In general, there appeared to be a lack of understanding across stakeholders on how to correctly apply the formula stipulated in Clause 13.8 on the Adjustments of Changes in Cost in the General Conditions of Contract in the standard bidding documents. In future projects, to reduce uncertainty and potential cost implications, it would be advisable to have an example of the application of the clause in the bidding documents. As good practice, bidders could also be requested to run sample scenarios based on existing indexes as part of the evaluation. It would also be beneficial to have examples or illustrative guides on the World Bank Group's website for potential bidders to access. This should be brought to the attention of Procurement Management staff.



The above lessons are adapted from the ICR.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR's analysis of the project is generally credible, sound and realistic, except for a likely underestimation of the risks of traffic demand being less than anticipated due to the volatile political and security situation prevailing in the country and broader region. Tourists tend to be notoriously fickle when there is a threat of this nature. Overall, the ICR was internally consistent, concise, and the analysis was evidence-based.

The ICR was an example of the new "agile ICR" as part of the World Bank Agility Project. The ICR still rated risk to development outcome during this interim phase.

a. Quality of ICR Rating Substantial