

P000692 Sep. 22, 2023

# Project Document of the Asian Infrastructure Investment Bank

**Sovereign-Backed Financing** 

**Arab Republic of Egypt** 

**Egypt Sustainable Transport and Digital Infrastructure Guarantee** 

# **Currency Equivalents**

(As at June 30, 2023)

Currency Unit – Egyptian Pound (EGP)
Currency Unit – Chinese Yuan (CNY)
USD1.00 = EGP30.87<sup>1</sup>
USD1.00 = CNY7.25<sup>2</sup>

#### **Borrower's Fiscal Year**

July 1 to June 30

#### **Abbreviations**

ADSL Asymmetric Digital Subscriber Line

AFDB African Development Bank

AIIB Asian Infrastructure Investment Bank

BOC Bank of China

CBE Central Bank of Egypt

CIBM China Interbank Bond Market

COP27 27th Conference of the Parties of the UNFCCC

CPI Consumer Price Index

CSRC China Security Regulatory Commission

DMU Debt Management Unit E&S environmental and social EBM Exchange Bond Market

EBRD European Bank for Reconstruction and Development

EIB European Investment Bank
EIRR economic internal rate of return
EMOF Egyptian Ministry of Finance

ESF Environmental and Social Framework

ESIA Environmental and Social Impact Assessment
ESMS Environmental and Social Management System

EU European Union

EUR Euro

FTTH Fiber-to-the-Home FX foreign exchange FY financial year

GDP gross domestic product

GHG greenhouse gas
GOE Government of Egypt

GPON Gigabit Passive Optical Network
GRM grievance redress mechanism

ICMA International Capital Market Association

<sup>&</sup>lt;sup>1</sup> USD/EGP Historical Exchange Rate. Bloomberg. Data retrieved on July 13, 2023.

<sup>&</sup>lt;sup>2</sup> USD/CNY Historical Exchange Rate. Bloomberg. Data retrieved on July 13, 2023.

IDB Inter-America Development Bank
IFC International Finance Corporation
IFI international financial institutions
IMF International Monetary Fund

JPY Japanese Yen

MCIT Ministry of Communication and Information

Technology

MDB multilateral development bank

MOT Ministry of Transport

NAFMII National Association of Financial Market Institution

Investors

PDG Partial Debt Guarantee
PRC People's Republic of China
PBOC People's Bank of China
PIU Project Implementation Unit

PPM Project-affected People's Mechanism

S&P Standard and Poor's

SHCH Shanghai Clearing House

SPIU Subproject Implementation Unit

SSFF Sovereign Sustainable Financing Framework

USD United States Dollar

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# 1. Summary Sheet

Project No.	P000692	
Project Name	Egypt Sustainable Transport and Digital Infrastructure	
	Guarantee	
AIIB Member	Arab Republic of Egypt (Egypt)	
Issuer Name	Arab Republic of Egypt	
Project Implementation Entity	Ministry of Finance of the Arab Republic of Egypt (EMOF)	
Sector	Multisector	
Subsector	Multi-subsector (Transport, Digital Infrastructure)	
Alignment with AIIB's Thematic	Technology-Enabled Infrastructure, Green Infrastructure,	
Priorities	Private Capital Mobilization	
Project Objective	To support Egypt's development of sustainable	
	infrastructure in the areas of green transport and digital	
	infrastructure by mobilizing private capital through a Partial	
	Debt Guarantee (PDG).	
Project Description	infrastructure by mobilizing private capital through a Partial	
Implementation Period	Start date: Q1 2024	
	End date: Q1 2027	
Proposed Amount of AIIB	This PDG guarantees up to USD200 million equivalent CNY	
Guarantee	of (i) the outstanding principal amount of the Bond and (ii) any	
	accrued but unpaid interest on the outstanding Bond owing	
	on the maturity date and at each interest payment date.	

Financing Plan	Up to USD545 million equivalent CNY (maximum guaranteed amount) to be guaranteed by AIIB and the African Development Bank (AFDB).  - AIIB's PDG: Up to USD200 million equivalent CNY of the outstanding principal amount of the Bond plus any accrued but unpaid Bond interest.  - AFDB Partial Credit Guarantee: Up to USD345 million equivalent CNY of the outstanding principal amount of the Bond plus any accrued but unpaid Bond interest.
Environmental and Social (E&S) Category (or AIIB equivalent, if using another MDB E&S Policy)	В
Conditions of Effectiveness	<ul> <li>A fully executed Indemnity Agreement.</li> <li>Relevant legal opinions, in form and substance satisfactory to AIIB.</li> <li>Payment of the front-end fee, the guarantee fee and the processing fee.</li> </ul>
Key Covenants	Use of proceeds – proceeds of the AIIB-guaranteed Bond must be used exclusively for Eligible Expenditures under the eligible subprojects. Prohibited uses: AIIB Exclusion List, Eligibility criteria as defined in Annex 2.  The project must be implemented in accordance with the
Retroactive Financing (Loan % and Dates)	Project Operations Manual.  None
Type of Guaranteed Instrument	PDG on a privately placed sovereign bond.  The guaranteed bond is a CNY-denominated Senior Unsecured bullet Bond with a fixed rate coupon, issued through a private placement in the CIBM market of the People's Republic of China (PRC) and under PRC law.
Policy Assurance	None.
Policy Assurance Economic Capital (Ecap) Consumption	Confirmed  Ecap amount: USD49.63 million (24.82 percent)

President	Jin Liqun	
Vice President	Konstantin Limitovskiy	
Director General	Najeeb Haider	
Manager	Stefen Shin	
Team Leader	Ming Hao, Investment Officer – Financial Institutions and	
	Syndications	
Team Members	Anatole Douaud, Investment Associate	
	Jinwen Ye, Investment Analyst	
	Bernardita Saez, Senior Counsel, Project Counsel	
	Tingying Wang, Senior Counsel, Project Counsel	
	Winnie Xuan Zhao, Legal Associate	
	Jingrong He, Senior Procurement Specialist	
	Rabindra Shah, Procurement Specialist	
	Rui Xiang, Financial Management Specialist	
	Rong Zhou, Environment Specialist	
	Aleksandr Hadzhiivanov, Senior Environmental and Social	
	Development Specialist	
	Marcin Sasin, Senior Economist, Project Economist	
	Michelle Rong Gao, Senior Treasury Officer	
	Bhavit Sharma, Product Specialist	
Credit Officer	Young Bong Cho, Risk Officer	
	Aleksandr Kanunnikov, Risk Officer	

#### 2. Project Description

# A. Project Overview

- 1. **Overview of the Project.** The AIIB Partial Debt Guarantee (PDG) of up to USD200 million equivalent in CNY to Egypt (the Project) will support the Government of Egypt (GOE, or the Issuer) to raise up to USD500 million equivalent CNY through a privately placed, three-year maturity, Sustainable-labeled Panda Bond (the Bond) in the China Interbank Bond Market (CIBM) by the end of 2023.<sup>3</sup> The use of Bond proceeds will, be in line with Egypt's Sovereign Sustainable Financing Framework (SSFF).<sup>4</sup> AIIB-guaranteed Bond proceeds will finance four Paris Agreement-aligned digital and transportation projects (the Subprojects). The Subprojects will contribute to reduce carbon emissions and improve the livelihood of Egypt citizens, including:
  - The expansion of the fiber connection for households in Cairo and Giza areas. This subproject is the first phase of a national program, which is expected to increase the penetration of broadband internet by up to 40 percent while also replacing old copper cables and offering faster connections. The use of fiber for internet connection will save energy, reduce carbon emission footprint and enable digital transformation across different regions of Egypt.
  - The rehabilitation of the tramway line 1 in Alexandria, the second-largest city in Egypt. It is one of the oldest tramway lines in the Middle East and North Africa region and is currently in serious need of renovation, causing traffic congestion, low transportation efficiency as well as various safety and security problems.
  - The rehabilitation of Cairo Metro Line 1, the oldest metro line in the capital city, in operation since 1987.
  - The rehabilitation of Cairo Metro Line 2, the second oldest metro line in the capital city, in operation since 1996.
- 2. The Project will enable the GOE to continue financing critical infrastructure projects during challenging macroeconomic times. None of the Subprojects have been implemented and are expected to start implementation during the first year of the Bond life. AllB-guaranteed Bond proceeds will be used to finance the GOE's counterpart funding under the Subprojects and will not be used for refinancing purpose. A detailed breakdown of the GOE-budgeted amounts allocated for each Subproject, covered by the Bond proceeds and by other financing sources, is presented in the Cost and Financing Plan section.
- 3. The Bond will also be guaranteed by the African Development Bank (AFDB). AFDB received its board approval on an up to USD345 million equivalent CNY, three-year maturity Partial Credit Guarantee on May 20, 2023. The AIIB and AFDB will

<sup>&</sup>lt;sup>3</sup> The target timeline may be changed by the GOE and based on regulators' review and approval process.

<sup>&</sup>lt;sup>4</sup> Please see more information in Annex 2.

guarantee the Bond with a Maximum Guaranteed Amount of up to USD545 million equivalent in CNY (the Guarantee) covering the principal amount of the Bond plus any accrued but unpaid Bond interest. AIIB will cover 37 percent<sup>5</sup> and AFDB 63 percent<sup>6</sup> of the Maximum Guaranteed Amount of the Guarantee.

- 4. The successful issuance of the Bond will contribute to the diversification of GOE's sources of financing through private investors in the international capital markets. In recent years, the GOE has successfully issued bonds in Euro, USD and Japanese Yen. This Bond will be Egypt's first issuance in the PRC's capital market and will open a new financing avenue for the GOE, while enabling the GOE to broaden its access to the international capital markets. This Project is key to the successful issuance of this Egypt sovereign bond and the financing of the four Subprojects due to the CIBM regulatory and market specificities.
- 5. The Project will facilitate Egypt's access to sustainable financing from international investors that may otherwise, without guarantee, be reluctant to invest in Egyptian sovereign bonds due to the current challenging economic environment. This will open up a new market for Egypt's sovereign funding in the long term. AIIB aims to mobilize private sector financing from international institutional investors to fund Egypt's digital and green transport projects, contributing to Egypt's sustainability development in the long term.
- 6. **Economic Situation.** The lingering adverse impact of the COVID-19 pandemic, the geopolitical tensions, the tightening of the global monetary conditions and the general macroeconomic volatility have led to a capital flight and made Egypt's financing on capital markets more challenging, with rising fund-raising costs and less potential interested investors.
- 7. In late October 2022, the GOE announced a shift to a flexible exchange rate regime to meaningfully reduce external imbalances that had contributed to the current market stress, in the long term. Since the announcement, the Egyptian Pound (EGP) has depreciated by around 35 percent against the USD. Subsequently, in December 2022, Egypt secured a four-year, USD3 billion International Monetary Fund (IMF) program that is expected to anchor macroeconomic stabilization and catalyze external finance.<sup>7</sup>
- 8. Egypt's access to international financing sources has been limited due to the economic situation. It has had to heavily rely on local debt issuances, and official multilateral and bilateral creditors for external finance since early 2022. In this context, Egypt is looking to diversify its funding sources by accessing the CIBM Panda Bond market.
- 9. **Project History.** The Project was proposed by the Egyptian Ministry of Finance (EMOF) in July 2022 and was included in AIIB's rolling pipeline in Aug. 11, 2022. The

<sup>&</sup>lt;sup>5</sup> AIIB's Maximum Guaranteed Amount is up to USD200 million equivalent CNY, covering the outstanding principal amount of the Bond plus any accrued and unpaid interest.

<sup>&</sup>lt;sup>6</sup> AFDB's Maximum Guaranteed Amount is up to USD345 million equivalent CNY, covering the outstanding principal amount of the Bond plus any accrued and unpaid interest.

<sup>&</sup>lt;sup>7</sup> See Annex 3: Sovereign Credit Fact Sheet for more information.

AFDB Board approved this Project in May 2023.8 The Project Team conducted several rounds of virtual due diligence meetings with the EMOF and the Subprojects' responsible ministries and implementation agencies, as well as on-site due diligence9 in June 2023.

- 10. **Project Objective.** The Project aims to support Egypt's development of sustainable infrastructure in the areas of green transport and digital infrastructure by mobilizing private capital through a PDG.
- 11. **Client Objective.** The GOE's objectives through the Project are:
  - (i) To obtain financing for sustainable and Paris Agreement-aligned infrastructure. The Bond will be the first issuance under the SSFF of GOE and will catalyze financing for the four Subprojects identified earlier, contributing to Egypt's national greenhouse gas (GHG) emission reduction target.
  - (ii) To diversify GOE's funding sources as part of its long-term funding strategy. The successful issuance of the Bond in the Panda Bond market will unlock a new investor base for Egypt. The expectation is that as Egypt becomes a familiar issuer in this market, subsequent issuances can require lower guarantee coverage in the mid-to-long term.
- 12. **Expected Results.** The expected results will be based on the following indicators:
  - (i) Number of people with affordable access to internet and digital services.
  - (ii) Kilometers of rail lines rehabilitated or upgraded.
  - (iii) Volume of GHG emissions reduction per year (GHG ton) (for transportation and digital subprojects separately).
  - (iv) Direct private capital mobilized measured by the amount of capital allocated to the digital and transport subprojects.
  - (v) Increased diversity of Egypt's funding measured by the increased portion of CNY Panda Bonds in Egypt's sources of external debts.
- 13. **Expected Beneficiaries.** The PDG provided for the Bond will support the livelihoods of local population by supporting the development of green transport and digital infrastructure. The Project is expected to benefit the following end beneficiaries:
  - (i) General public (benefiting from enhanced transportation services and enhanced internet connection).

<sup>9</sup> The Project Team has conducted a physical due diligence, visiting the relevant ministries and Subproject sites.

<sup>&</sup>lt;sup>8</sup> AFDB already approved an up to USD345 million CNY equivalent PDG for the Project. May 20, 2023. AFDB. Link.

(ii) Construction industry workers (new employment opportunities through the construction and maintenance of the Subprojects).

#### B. Rationale

- 14. **Strategic Alignment.** The Project is aligned with the Green Infrastructure, Technology-Enabled Infrastructure and Private Capital Mobilization thematic priorities under AIIB's Corporate Strategy. Additionally, it is also aligned with Egypt's long-term development strategy.
- 15. The Project is aligned with AIIB's thematic priorities as follows:
  - (i) **Green Infrastructure.** The Project is aligned with the Bank's Green Infrastructure thematic priority as it supports the financing of green transport and digital infrastructure projects in Egypt through its SSFF.
  - (ii) Technology-Enabled Infrastructure. The Project is aligned with the Bank's Digital Infrastructure thematic priority as it supports high-speed internet access for Egypt.
  - (iii) **Private Capital Mobilization.** AllB will provide a PDG, without which Panda Bond investors would not be able to invest in this financial instrument, to provide financing for the Subprojects which are in the sectors of green transport and digital infrastructure in Egypt. This will lead to direct private capital mobilization.
- 16. The Project is aligned with AIIB's sector strategies as follows:
  - (i) Digital Infrastructure. The Project will include the financing of digital infrastructure Subprojects, including a hard infrastructure project to install fiber connection and exchange points in Egypt. This Subproject will help "bridge the digital divide" by providing faster internet access to the population and businesses in Egypt.
  - (ii) **Transport.** The Project will also include Subprojects that aim to rehabilitate existing urban transport infrastructure such as tramways and metro lines. These projects will increase the energy efficiency of such infrastructure and improve the transport conditions in the two largest cities of Egypt.
  - (iii) **Mobilizing Private Capital for Infrastructure.** This Project will directly mobilize private capital to finance infrastructure Subprojects.
- 17. **Financing Operations in Non-Regional Members.** The Project aligns with the Strategy on Financing Operations in Non-Regional Members as Egypt is considered as "geographically proximate to and closely economically integrated with Asia" and is within the ceiling of 15 percent of total approved AIIB financing.
- 18. **Alignment with Egypt Vision 2030.** The Project is in line with Egypt's Sustainable Development Strategy: Egypt Vision 2030, <sup>10</sup> hence enabling Egypt to

<sup>&</sup>lt;sup>10</sup> Ministry of Planning and Economic Development. 2023. Egypt Vision 2023. Link.

achieve a sustainable and inclusive development which aims to alleviate poverty and achieve prosperity for future generations. This Project will provide financing to fulfill these objectives.

- 19. **Paris Agreement Alignment.** Egypt is committed to becoming a leader in climate and socioeconomic development, setting an example for the rest of Africa and the Middle East. In November 2022, Egypt hosted the 27th Conference of the Parties of the UNFCCC (COP27), highlighting its efforts in accelerating international action for climate change and its leading role in international dialogue around climate action. This Project will contribute to Egypt's goals under the Paris Agreement.
- 20. All four Subprojects (one digital infrastructure and three urban sustainable transportation projects) are fully aligned with the AIIB's Paris Agreement mitigation (BB1) and adaptation (BB2) goals and qualify for 100 percent of climate mitigation finance using the joint Multilateral Development Bank (MDB) Climate Finance Tracking Methodology. The Subprojects will generate substantial impact in terms of energy savings, reduction of GHG emissions, as well as other environmental benefits like reduction of air pollution, better and affordable urban mobility and reduction of traffic incidents. GHG reductions will be reported on an annual basis as part of overall project monitoring and reporting. All four Subprojects fall under universally aligned list for BB1 and are assessed against climate risks with relevant resilience measures included for BB2 alignment.
- 21. **Climate Finance Attribution**. The climate finance share is 100 percent under the category of Climate Mitigation in compliance with the joint MDB Climate Tracking Principles, <sup>11</sup> Category 8.1 *Urban and rural public transport* for transport Subprojects, and category 10.3 *Telecommunication networks with energy efficiency levels that meet best international practices*. All four Subprojects will provide substantial contribution on reduction of GHG emissions.
- 22. **Value Addition by AIIB.** The Project will benefit the GOE in the following ways:
  - (i) Support the GOE financing to the development of green transport and digital infrastructure Subprojects in a challenging macroeconomic environment.
  - (ii) AIIB's PDG will mobilize private finance from international commercial investors and contribute to Egypt broadening its access to the international capital markets.<sup>12</sup>
  - (iii) AIIB's involvement as a guarantor of the Bond can enhance the use of proceeds based on the high environmental and social (E&S) and procurement standards.
  - (iv) Enable the GOE to access a new funding market, diversifying its funding base and strengthening its funding capacity on the long term.

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<sup>&</sup>lt;sup>11</sup> MDB Common Principles for Climate Mitigation Finance Tracking Version 3. 2021.

<sup>&</sup>lt;sup>12</sup> Based on the Debt Sustainability Analysis conducted by the Project Team, regaining international capital market access is key for Egypt to improve its current debt sustainability profile.

- (v) Successful issuance of this first Bond under the SSFF will enable the GOE to demonstrate to the public and the international capital market its commitment to finance sustainable infrastructure aligned with the Paris Agreement.
- (vi) Overall, AIIB's credit enhancement will provide additional comfort to all stakeholders of the Bond.
- 23. Value Addition to AllB. The Project will benefit AllB in the following ways:
  - (i) This Project will be the first sovereign-backed PDG on bonds for AIIB and will open similar opportunities for other members. The PDG will also lead to product diversification in AIIB's investment portfolio.
  - (ii) Through this Project, the cooperation and partnership between AIIB and the GOE will be strengthened.
  - (iii) This is the first time for AIIB to work with AFDB on a sovereign-backed financing project and is expected to expand the future cooperation between two institutions.
  - (iv) The innovative structure of the Project provides a long-term opportunity for AIIB to contribute to private capital mobilization and connectivity among its members.
- 24. **Lessons Learned.** Few international financial institutions (IFI) guarantee of sovereign bonds transactions have been implemented and each is highly singular and customized. AIIB has analyzed precedents in the preparation of this Project—the World Bank's guarantees on Argentina and Ghana and the recent Inter-America Development Bank (IDB) guarantee on Ecuador sovereign social bond—and these operations provide important lessons to the Bank. It is important to note that both the World Bank and IDB structure their guarantees under policy-based instruments and therefore have a different approach toward the requirements on use of proceeds of the issuance. Lessons learned include (i) the need for MDBs to participate in the roadshow for the issuance for investors to understand the characteristic and benefits of the guarantee; and (ii) the need to understand and closely follow the macroeconomic situation of the sovereign.
- 25. AIIB has learned from these operations that MDBs need to be prepared for a default event of the issuer. Argentina and Ghana defaulted on the underlying bonds guaranteed by the World Bank. For Argentina, the World Bank converted the called guarantee amounts into a five-year sovereign loan. Ghana defaulted on its coupon payment in April 2023, as a result of which the World Bank proceeded to make payment. In the case of Ecuador, the IDB guaranteed bond was not called on, although the sovereign had partially defaulted and had a rescue package from the IMF. The lessons learned include (i) the different considerations MDBs must take into account in the event that a default has ended into a sovereign loan, and (ii) close coordination with other MDB lenders and the IMF in case of a default.

#### C. Description and Components

26. **Overview.** The PDG provided by AIIB will enable the GOE to issue a CNY Sustainable Panda Bond. The Bond proceeds from the offering will be remitted out of the PRC and will be exclusively earmarked for eligible sustainable and green

expenditures under the SSFF. The proceeds guaranteed by AIIB will finance one digital infrastructure Subproject, and the GOE's counterpart funding contribution for the three green transport Subprojects. The allocation of the AIIB-guaranteed Bond proceeds between the four Subprojects is detailed in Technical Analysis (3.A.).

- 27. **Components.** There will be one component and four subcomponents financed through this Project:
  - (i) **Component A**. Green Transportation and Digital Subprojects. This component will be divided in four subcomponents:
    - i. **Subcomponent A.1.** The Fiber-to-the-Home (FTTH) Subproject, the expansion of fiber-based high-speed internet to Egyptian households in Cairo and Giza areas.
    - ii. **Subcomponent A.2.** The Alexandria Raml Tram Rehabilitation Subproject (The Tram Subproject), the upgrade and modernization of the existing Alexandria tram line located in the second-largest city in Egypt, Alexandria.
    - iii. **Subcomponent A.3.** The Cairo Metro Line 1 Rehabilitation Subproject (Line 1 Subproject).
    - iv. **Subcomponent A.4.** The Cairo Metro Line 2 Rehabilitation Subproject (Line 2 Subproject).
- 28. **Eligibility Criteria.** The Indemnity Agreement will set out that the EMOF will use the AIIB-guaranteed Bond proceeds to finance eligible expenditures under the four Subprojects, which are aligned with Egypt's SSFF and AIIB policies. In the event of delay in the execution of the Subprojects during the Project's implementation period (three years), the Indemnity Agreement sets forth that the EMOF may propose the replacement of one or more of these Subprojects to AIIB, with other Subprojects under the SSFF that meet the eligibility criteria set forth in Annex 2.
- 29. **Bond Issuance Framework.** Egypt's SSFF has been developed in accordance with the International Capital Market Association (ICMA) Green Bond Principles 2021, ICMA Social Bond Principles 2021, Sustainability Guidelines 2021, Loan Market Association Green Loan Principles 2021 and Social Loan Principles 2021. Under the SSFF, Egypt, acting through the EMOF, can issue green, social, sustainability or thematic bond(s); sukuk(s); loans and any other types of debt instruments (collectively referred to as Sustainable Debt Instruments). Thematic issuance refers to blue, gender or other types of thematic labels focusing on specific environmental, social or sustainability objectives. The SSFF takes into consideration the Guidelines for Blue Finance from the International Finance Corporation for green projects pertaining to blue finance; and the Gender Bonds Guidance, Bonds to Bridge the Gender Gap developed by UN Women, International Finance Corporation (IFC) and ICMA for social projects pertaining to gender finance.
- 30. **Bond Issuance.** The proceeds of the Bond are to be delivered and settled through the book-entry facilities of Interbank Market Clearing House Co., Ltd. (also known as the Shanghai Clearing House (SHCH). The GOE will appoint Bank of China

(BOC) the lead underwriter and HSBC to be the joint lead underwriters for the issuance given both financial institutions are considered as the most experienced underwriters of Bond issuances in the PRC. The Bond will be registered with SHCH in accordance with applicable rules and regulations governing the CIBM.

# D. Cost and Financing Plan

- 31. The Maximum Guaranteed Amount of the Bond is up to USD545 million equivalent CNY, of which AIIB will guarantee up to USD200 million equivalent CNY and AFDB up to USD345 million equivalent CNY. <sup>13</sup> One component and four subcomponents will be covered by the Project:
  - (i) Component A: Green Transportation and Digital Subprojects. This component will be divided in four subcomponents:
    - i. Subcomponent A.1: FTTH Phase 1.
    - ii. Subcomponent A.2: Alexandria Tram El Raml rehabilitation.
    - iii. Subcomponent A.3: Cairo metro line 1 rehabilitation.
    - iv. Subcomponent A.4: Cairo metro line 2 rehabilitation.

**Table 1. Project Cost and Financing Plan** 

Item	Allocation of AIIB- guaranteed Bond proceeds (USD million)	Total GOE Subcomponent cost (USD million)
Component A: Green Transportation and Digital Subprojects <sup>14</sup>	183.5	N/A
Subcomponent A.1: FTTH (Phase 1)	112	510
Subcomponent A.2: Alexandria Tram	41	188
Subcomponent A.3: Cairo Line 1	21	93
Subcomponent A.4: Cairo Line 2	9.5	39
Bond interest amount:	16.5	N/A
Total	200	830

32. **Retroactive Financing.** The AIIB-guaranteed Bond proceeds will not be used for any retroactive financing and will only be used to finance future expenditure needs of the four subcomponents detailed above.

 $^{13}$  The amounts are estimations in USD and will be adjusted according to the USD/CNY exchange rate closer to the bond issuance date.

<sup>14</sup> Subcomponent amounts are indicative and subject to the allocation of the principal of the Bond, which will happen on every budget year of the GOE after its issuance. The current amounts are based on the current total cost of the subprojects collected during the due diligence and on a non-weighted percentage of the total GOE part of the financing of the four subprojects.

33. **Guarantee Fee.** The fees applicable to the AIIB PDG are set out in the Bank's Sovereign-Backed Loan and Guarantee Pricing Decision, <sup>15</sup> with the latest revision in June 2021. The fee applicable to the Project is summarized in Table 2.

**Table 2. Sovereign Partial Debt Guarantee Fee Structure** 

Fee	Rate	On-time/recurring
Front-End Fee	0.25 percent	One time
Processing Charge	Up to 0.50 percent	One time
Guarantee Fee	0.50 percent	Recurring basis (paid upfront) <sup>16</sup>

- 34. **Legal Documentation.** The legal documentations involved for the PDG structure are as follows:
  - (i) Bond Documentation. The Bond Documentation will include the private placement memorandum/private placement agreement(s) of the underlying Bond, specifying its terms and conditions. It will be disclosed to investors as part of the bond issuance. The Bond Documentation will be finalized by Bond launch. The Bond Documentation will only be reviewed and agreed by AIIB, with no signature required.
  - (ii) Indemnity Agreement. An Indemnity Agreement will be signed between AIIB and Egypt, which will set out the obligation of the Issuer to reimburse AIIB, on demand or as the AIIB may otherwise direct, for payments under the PDG, as well as all losses, damages, costs and expenses incurred by AIIB relating to or arising from the PDG. The Indemnity Agreement also sets forth the fee payment obligations as well as the Project-specific operational obligations, including the covenant for GOE to use the AIIB-guarantee Bond proceeds exclusively for eligible expenses under the Subprojects. The Indemnity Agreement will be finalized by Bond launch. The breach of obligations under the Indemnity Agreement will allow the AIIB to suspend or cancel, in whole or in part, the rights of Egypt to make withdrawals under any other loan or credit agreement with Egypt, or any AIIB loan to a third party guaranteed by Egypt, and may declare the outstanding principal and interest of any such loan or credit to be due and payable immediately. A breach by Egypt of its obligations under the Indemnity Agreement will not, however, discharge any obligations of the AIIB under the Letter of Guarantee to investors. The Indemnity Agreement will be subject to public international law.
  - (iii) **Letter of Guarantee.** The Guarantee will be reflected in the form of a Letter of Guarantee, which is a legally binding document issued jointly by the AIIB and AFDB to the benefit of bond holders. The Letter of Guarantee will set forth the

<sup>&</sup>lt;sup>15</sup> AIIB. 2021. Sovereign-Backed Loan and Guarantee Pricing Decision (Revised June 2021). Link.

<sup>&</sup>lt;sup>16</sup> The fee is calculated based on the pricing decision wording of the "Financial exposure under the guarantee (present value of the guaranteed payments at earliest call dates)." AIIB. 2021. Sovereign-Backed Loan and Guarantee Pricing Decision (Revised June 2021). <u>Link.</u>

unconditional and irrevocable guarantee of the payment of the Bond principal and interest amounts due on the scheduled payment dates for up to each Guarantor's pro-rata share of the Maximum Guaranteed Amount (up to USD545 million equivalent CNY). It will be referenced by the Bond Documentation and will also be finalized by Bond launch. The obligations of the Guarantors under the Letter of Guarantee will remain in full force and is effective until payment in full of their respective obligations under the Letter of Guarantee or termination of the Guarantee. The Letter of Guarantee will be subject to the laws of the People's Republic of China as required by regulators.

- (iv) **Guarantor Arrangements.** AllB and AFDB are expected to enter into an agreement to set forth their\_obligations and arrangements in the areas of information sharing and will set forth the process and procedure for any coordinated actions that may be required under the Guarantee, such as any potential coordinated actions needed in the event of acceleration.
- 35. Effectiveness of the Guarantee and Conditions for Guarantee Call. The issuer has the principal obligation to repay bondholders. However, once the Guarantee is effective, the Guarantor's payment obligation as provided under the Letter of Guarantee may be triggered in the event of a non-payment by the Issuer, which has occurred and is continuing, and this event has been confirmed by BOC, and the latter has notified and instructed the Guarantors in writing to pay.
- 36. Following the payment by AIIB, for its respective share, the Bank may at its sole discretion, and as provided in the Indemnity Agreement, demand immediate repayment or provide different repayment terms. In approving the repayment terms, the President will consider the door-to-door tenor of the PDG transaction, therefore factoring in the tenor of the guarantee when defining the final maturity for repayment (subject to the average maturity limits applicable to sovereign-guaranteed loans). The Board will be informed of such different repayment terms.

# E. Implementation Arrangements

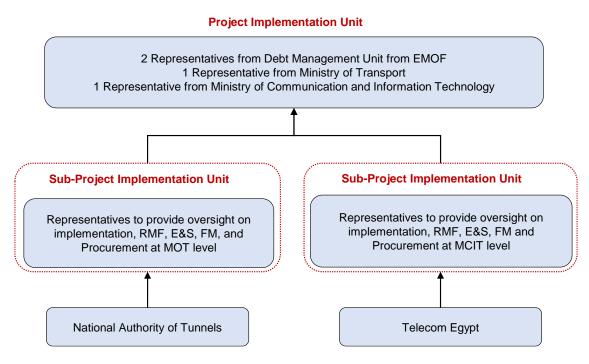
- 37. **Implementation Period.** The implementation period is expected to be from the fourth quarter (Q4) 2023 to Q4 2026, covering a period of three years, consistent with the life of the Bond. The implementation period of the four Subprojects is expected to start as of Q4 2023, but no later than end of 2024. The implementation period of the Subprojects might be longer than the implementation of the Project, <sup>17</sup> but the AIIB-guaranteed Bond proceeds will be allocated to the GOE budget in these Subprojects during the three-year implementation period of the Project only.
- 38. **Implementation Management.** The EMOF, representing the GOE, has the overall responsibility of developing Egypt's financial policies and plans, coordinating budgets, rationalizing and controlling government spending. Within the EMOF, the Capital Market and Debt Management Unit (DMU) is tasked to lead on the bond issuances and coordinate the project preparation and implementation with the relevant lead ministries and coordinate with other government entities. The DMU will lead the

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<sup>&</sup>lt;sup>17</sup> Please refer to Annex 5 for the expected implementation period of each subproject.

management of the overall implementation arrangements of this Project. The implementation arrangement is illustrated in Figure 1.

**Figure 1. Implementation Arrangements** 



- 39. **Project Implementation Unit.** A Project-specific Project Implementation Unit (PIU) will be established prior to the Bond issuance at the EMOF DMU level, utilizing the DMU's existing Sustainable Finance Working Group to provide oversight on SSFF implementation, and will be responsible for the reporting and monitoring in relation to the Project, including the matter regarding the Guarantee implementation oversight of the Subproject Implementation Units (SPIUs). The PIU will provide the relevant reporting metrics to AIIB periodically based on the agreed frequency. The relevant metrics required for monitoring and reporting will be detailed in the Project Operations Manual described in para. 43 as well as the Reporting and Monitoring section in para. 44. The PIU will consist of:
  - (i) Two DMU representatives from the EMOF.
  - (ii) One representative from the Ministry of Transport (MOT) to coordinate with the SPIUs.
  - (iii) One representative from the Ministry of Communication and Information Technology (MCIT) to coordinate with the SPIUs.
- 40. **Subproject Implementation Units.** At the Subproject level, implementation will be overseen by the relevant ministries, the MCIT for the FTTH Subproject, and the MOT for the Tram Subproject and the two Cairo Metro Line subprojects. SPIUs will be established at the ministries' level, and be held accountable for monitoring the Subproject performance, executing appropriate governance and control measures, and providing reporting to the PIU in a timely manner.

41. The execution of the Subprojects will be delegated to the Implementation Agencies under their respective national authorities/ministry, which are detailed in Table 3.

**Table 3. Summary of Implementation Agencies** 

Subproject	Relevant Ministry	Implementation Agency
FTTH Subproject	MCIT	Telecom Egypt
Tram Subproject	МОТ	National Authority of Tunnels
Line 1 Subproject	МОТ	National Authority of Tunnels
Line 2 Subproject	МОТ	National Authority of Tunnels

- 42. **Project Operations Manual.** A Project Operations Manual will detail the implementation processes of this Project as per the below arrangement and will be adopted prior to effectiveness of the PDG.
- 43. **AIIB Implementation Support.** A Project Operations Manual will be developed to help streamline and support the GOE in its implementation of the Subprojects as well as general oversight on the use of proceeds from the AIIB-guaranteed Bond. The Project Team will conduct supervision missions to follow the implementation of the use of proceeds of the Bond. The frequency of the missions will depend on the implementation progress and complexity.
- 44. **Reporting and Monitoring.** The PIU is responsible for providing the reports requested by AIIB on the Bond proceeds in a timely manner, covering aspects including the Result Monitoring Framework, Environmental and Social Information, Procurement and Financial Management. Details of the specific reports required for each aspect is summarized below and in Annex 6.
- 45. **Environmental and Social.** An annual allocation and impact report will be published in accordance with the reporting frequency of the Bond, disclosing amounts allocated to various eligible Subprojects, unallocated amount, and Subproject-level impact. An independent E&S monitoring report on actions included in the Environmental and Social Action Plan (ESAP) implementation of the Environmental and Social Management Plan (ESMP), as well as a progress report will also be provided, as applicable. Details of the reports are presented in Annex 6.
- 46. **Procurement.** The PIU, relying on the SPIUs, is responsible for procurement supervision and monitoring. A project procurement implementation monitoring report is required for submission to AIIB within six months after the end of fiscal year. The report will need to cover (i) project procurement implementation details and status; (ii) staff training information; (iii) any identified deviation from applicable policy requirements; (iv) any substantial contract variation (above 15 percent original contract value), delay and quality issue; (v) any contract disputes, arbitration or termination; and (vi) justification of contract price reasonableness whenever non-competitive bidding/selection method is

adopted. In addition, a timely report of any procurement related prohibited practices is required.

- 47. **Financial Management.** The SPIUs, reporting to the PIU, will have a financial management function providing overall coordination and oversight for funds flow and reporting. The Subprojects' lead ministries are responsible for the financial management of the Subprojects.
- 48. The PIU is responsible for monitoring and supervising the allocation of eligible expenditures, with regular financial reports submitted by relevant ministries' departments to track the utilization and execution of allocated funds for the eligible Subprojects. The annual allocation report, disclosing the allocation of net proceeds and impact of proceeds, will be made publicly available within one year of the bond issuance. The Project will provide an external review report (e.g., a second-party opinion) on an annual basis. This report will assess the allocation of net proceeds toward eligible expenditures and the progress of each Subproject's implementation throughout the three-year issuance period. The external review report should be submitted to AIIB no later than six months after the end of the fiscal year.
- 49. Flow of Funds at Bond Issuance and Repayment. At issuance, it is expected that the lead bookrunner will collect the proceeds raised during the issuance of the Bond. Once the Bond is successfully issued, the lead bookrunner will deposit the proceeds into an onshore non-resident CNY Account owned by the EMOF. Upon EMOF's instruction, the account bank of the onshore Non-resident CNY Account transfer the proceeds from the onshore non-resident CNY account in the PRC to the CNY offshore account owned by the Central Bank of Egypt (CBE). CBE then subsequently deposits the equivalent amount in EGP to the EMOF for its future distribution to relevant ministries for the four Subprojects identified. This is demonstrated in Figure 2.
- 50. At payment of coupon and repayment of principal, CBE will utilize its existing CNY balance from its CNY account in Egypt to transfer to the designated EMOF non-resident account located in the PRC, in CNY prior to the coupon/principal due date. The money will then be deposited into the designated SHCH account for the Bond and subsequently distributed to bondholders accordingly as illustrated in Figure 3.

Figure 2. Funds Flow for Bond Proceeds at Issuance

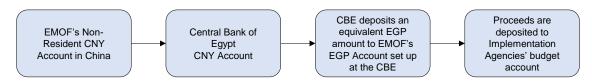


Figure 3. Funds Flow for Interest / Principal Repayment



- 51. **Funds Flow of Distribution to Subprojects.** Funding to the Subprojects will be approved as part of the national budget process. The budget proposals for GOE expenses under these Subprojects are submitted by government ministries (MCIT and MOT), reviewed by the EMOF and ultimately approved by Parliament.
- 52. After receiving the deposit of the Bond proceeds from CBE, the EMOF will allocate the funds to finance the expenditures of eligible Subprojects based on the approved GOE budget for the four Subprojects. This process will be followed throughout the Project's implementation period (Implementation period of the Project) starting from the year of the Bond issuance.

#### 3. Project Assessment

# A. Technical Analysis

53. **Project Design.** The Project is designed to support critical sustainable infrastructure financed by the GOE in the transport and digital sectors. The AIIB PDG will enable the GOE to finance the four subcomponents of this Project, as well as to mobilize private capital. It will also open new long-term financing avenues for the GOE, which is critical to ensure future infrastructure program financings. The design of the Project is presented in Figure 4.

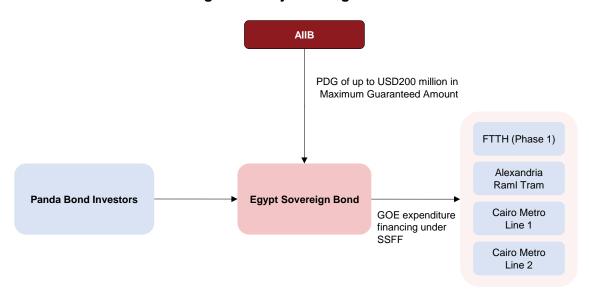


Figure 4. Project Design Chart

54. The following technical analysis will focus on (1) the Subprojects' technical assessment and on (2) the Bond's technical assessment, which enables the financing of the Subprojects.

# (1) Technical Analysis of the Subprojects

55. **Public Transport Sector.** At the national level, the public transportation sector in Egypt is one of the main focuses<sup>18</sup> of the "National Projects"<sup>19</sup> which aims to foster economic growth through the modernization and construction of Egypt's transportation network. Egypt's mass public transportation infrastructures are small compared to the rapidly growing urban population in the Cairo and Alexandria metropolitan areas. Cairo's population has roughly doubled from 10 million to 20 million over the past 30 years. The Alexandria and Cairo metro system are owned by the National Authority for Tunnels (NAT), a state-owned agency under the control of the MOT. Cairo Metro comprises of three lines, Lines 1, 2 and 3, which became operational in 1987, 1996, and 2006, respectively, and carries over 3.5 million daily passengers. Alexandria is Egypt's second-largest city (5.16 million inhabitants). Alexandria is also facing a mismatch

<sup>&</sup>lt;sup>18</sup> Ministry of Planning and Economic Development. 2023. Egypt's planning, transport ministers discuss the transportation investment plan for FY 2023-2024. <u>Link</u>.

<sup>&</sup>lt;sup>19</sup> The Arab Republic of Egypt Presidency. 2023. National Projects. Link.

between the rapidly growing population, and the quantity and quality of public transportation, resulting in a constrained mobility due to worsening road traffic congestion. Alexandria has 20 tramway lines covering about 140 stops,<sup>20</sup> and one train line which is currently being transformed into a metro. It is also managed by the NAT.

- 56. **Internet Connectivity.** Internet connectivity is higher than the global average (66 percent) in Egypt with 72 percent<sup>21</sup> of the Egyptian population having access as of year-end 2021. Egypt currently has a fixed broadband subscription of 11.46 million, indicating an eleven percent <sup>22</sup> fixed broadband penetration. The fixed internet connection is mostly relying on DSL technology, which is outdated, and this explains the lower ranking in fixed-internet speed as 92<sup>nd</sup> fastest in the world<sup>23</sup> in May 2023.
- 57. **Telecom Egypt.** Telecom Egypt is the only fixed-line operator in Egypt and operates both the retail and the wholesale market for international and local internet-related service providers. They have about nine million fixed broadband customers (about 85 percent of the market). <sup>24</sup> Telecom Egypt is 80-percent-owned by the government through the MCIT, and 20 percent are on free float on the London and Egypt stock exchange since 2005. In May 2023, the GOE announced the sale of a 9.5 percent stake of Telecom Egypt to local and international buyers for about USD121.6 million<sup>25</sup> as part of the privatization program included in the IMF package of December 2022.

# 58. Technical Assessment of the Digital Infrastructure Component (FTTH).

- 59. The Subproject supports Phase 1 of the nationwide FTTH program. This initial phase of the FTTH program will focus on historical Cairo, pharaonic Giza, Nasr city and Madinaty, where copper cable will be replaced with fiber. Phase 1 is planned to start after six months of securing the funds and will be implemented within the two years afterward. This phase will cost up to USD510 million, while the entire program will cost up to USD2.1 billion. AIIB-guaranteed Bond proceeds will support this FTTH Phase 1 development, which will enable 2.4 million households to be connected to higher-speed internet through fiber installation. This district of Cairo and Giza have been prioritized by Telecom Egypt and as they are some of the most densely populated in the country, hence having the highest impact.
- 60. Telecom Egypt has hired Detecon and McKinsey in 2022 to prepare their corporate access strategy and the FTTH roadmap from 2023 to 2027. The goal of this strategy is to enhance the fixed broadband experience as the infrastructure for the development of Egypt's digital economy and gross domestic product (GDP). From a technical point of view, the FTTH program will increase service reliability, offers the best technology to replace the decaying copper technology, offers higher speed to meet future demand and will enable customer to access new online services requiring higher speed and data. When not installing connections for the first time to some households and companies, the project will replace the existing Asymmetric Digital Subscriber Line

<sup>21</sup> World Bank data. Internet connectivity. 2023. Link.

<sup>&</sup>lt;sup>20</sup> Urbanrail. Alexandria. Link.

<sup>&</sup>lt;sup>22</sup> Ministry of Communications and Information Technology. ICT Indicators in Brief. 2023. Link.

<sup>&</sup>lt;sup>23</sup> Speedtest Global Index. Egypt Median Country Speeds July 2023. Link.

<sup>&</sup>lt;sup>24</sup> Telecom Egypt. 2023. Telecom Egypt Corporate Presentation March 2023.

<sup>&</sup>lt;sup>25</sup> Reuters. 2023. Egypt sells \$121.6 mln stake in state-controlled Telecom Egypt. <u>Link</u>.

(ADSL) or other DSL-based copper network infrastructure with state-of-art fiber Gigabit Passive Optical Network (GPON) infrastructure. GPON-based infrastructure can transmit data faster with a larger bandwidth, making the connection less susceptible to interruptions. Furthermore, it is minimally affected by external factors, such as potential electromagnetic interferences and has a longer life cycle of 30-50 years as it is less prone to corrosion. Passive in the GPON definition denotes that the optical fiber network does not rely on any electrically powered equipment for transmission of the signal in its path. Today, GPON technology has proven to be almost 95 percent more energy efficient than DSL-based copper networks and is widely considered as the most energy-efficient access network option, with energy consumption more than three times lower than fixed wireless access. Moreover, energy consumption does not increase as bandwidth grows. With other access technologies, increased bandwidth means greater energy consumption. The energy efficiency, reliability and stability of the internet connection in Egypt will be greatly improved by this subproject.

#### 61. Technical Assessment of the Transportation Components.

62. **Tram Rehabilitation Project.** The Alexandria Tramway network serves the central and eastern parts of the city, with its tracks and rolling stocks last built in 1863 and 1976, respectively. The subproject is viable from a technical perspective as it entails the modernization and upgrade of the tram line's rolling stocks, associated stations and ticketing system, which will optimize the reliability, efficiency and capacity of the tram line. Technical specifications of the subproject are shown in Table 4.

**Table 4. Tram Rehabilitation Project Technical Specifications** 

Specs	Pre-rehabilitation	Post-rehabilitation
Length	14.4 kilometers (km)	14.4km
Average speed	11 kilometers per hour (km/h)	22 km/h
Ridership	200-300 people / train	620 people / train
Stations	24 stations all situated at ground level	24 stations; 11 remain at ground level, 12 elevated through viaducts, one situated in an open trench
Fare collection	Manual	Automated – and will be integrated with other rehabilitated transportation system in Alexandria

63. **Cairo Metro Line 1.** The rehabilitation includes the modernization of signaling system; centralized control system; and other electrical, mechanical and safety systems. The rehabilitation will enable the line to have a cohesive capacity management system,

<sup>&</sup>lt;sup>26</sup> Fiberplus. November 2019. Seven Benefits of Fiber Optic Cables over Copper Wire. Link.

including automatic route setting, efficient schedule management and bettercoordinated disaster management. This subproject will enhance the safety and efficiency of Line 1 by reducing the amount of manual intervention required for its daily operations. Detailed technical specifications of the subproject are shown in Table 5.

Table 5. Cairo Metro Line 1 Rehabilitation Project Technical Specifications

Specs	Pre-rehabilitation	Post-rehabilitation
Ridership / train	Expected to remain stable at direction	60,000 people / hour (h) per
Efficiency	5 minutes (min) between trains (12 trains / h per direction)	2.5 min between trains (24 trains / h per direction)
Signaling system	Hybrid of classic fixed block signaling with limited computer overlay	Communications-based train control
Control system	Manual with limited automation	Automatic
Firefighting system	Dry	Wet
Flooding management	None	Have been included in the project design
Electromechanical	Pumps, fans, air-conditioning are expiring	Upgrade / renewal of pumps, fans, air-conditioning and other possible
Telecommunications	Un-unified system	Integrated system including radio network, station intercommunication, CCTV, fire protection, etc.

64. **Cairo Metro Line 2.** This subproject also focuses on the upgrade of an automatic signaling system, centralized control system and other electrical/mechanical and safety measures on Cairo Metro Line 2. Similar to the Cairo Metro Line 1, it is expected to reduce the manual control required for the operation of Line 2 and enable the line to have a well-integrated capacity management system, thereby improving its efficiency and safety. Detailed technical specifications of the subproject are shown in Table 6.

Table 6. Cairo Metro Line 2 Rehabilitation Project Technical Specifications

Specs	Pre-rehabilitation	Post-rehabilitation
Ridership	Expected to remain stable at 44,000 people / h per direction	

Efficiency	4 min between trains	2 min between trains
	(15 trains / h per direction)	(30 trains / h per direction)
Signaling system	Hybrid of classic fixed block signaling with limited computer overlay	Communications-based train control
Control system	Manual with limited automation	Automatic
Firefighting system	Dry	Wet
Flooding management	None	Have been included in the project design
Electromechanical	Pumps, fans, air- conditionings are expiring	Upgrade / renewal of pumps, fans, air-conditions and other possible
Telecommunications	Ununified system	Integrated system including radio network, station intercom, CCTV, fire protection, etc.

# (2) <u>Technical Analysis of the Guaranteed Bond Issuance</u>

- 65. **Guarantee Structure.** AIIB and AFDB (the Guarantors) will unconditionally and irrevocably guarantee (the Guarantee), for the benefit of the Bondholders, up to their pro-rata shares of the Maximum Guaranteed Amount (up to USD545 million equivalent CNY, inclusive of outstanding principal amount of the Bond and any accrued but unpaid Bond interest).
- 66. Under the Guarantee, each Guarantor will assume joint liability (as defined in the PRC Civil Code<sup>27</sup>) with the GOE toward bondholders for the payment of the guaranteed amounts under the Bond up to its respective pro-rata shares of the Maximum Guaranteed Amount. If the Guarantee is called, any amount disbursed by the Guarantors will not be available for new payments under the Guarantee.
- 67. The Guarantee features are guided by the regulatory conditions of the CIBM and the profile of the Issuer. For context and comparison, the Project Team has compared two recent guaranteed bond issuances to align with the market, namely the Samurai bond issued by GOE in 2022 under the guarantee of Sumitomo Mitsui Banking Corporation, which provides, in a different bond market (Japan), a rational for the coverage level which is similar to the one proposed for this guarantee in a different market, mainly due to the rating of the Issuer. As a point of comparison in the Panda

<sup>&</sup>lt;sup>27</sup> Under the PRC Civil Code, AIIB is liable only for its pro-rata share in the event of a payment default by the issuer, and will not be liable for AFDB's pro-rata share if the guarantee shares have been agreed in advance.

Bond market, the Project Team provided the example of the Mercedes Green Bond guaranteed by its parent group Daimler (the "Market Comparable"), which shows similar features, in spite of the major differences (publicly offered bond, parent company guarantor, private entities already investment grade rated).

- 68. **Guarantee Indemnity Level.** AllB's PDG will cover Bond principal and unpaid Bond interest of up to USD200 million CNY equivalents, which represents 37 percent of the total expected Bond principal and Bond interest amount of the guaranteed bond. The sum of Bond principal and Bond interest amount will not exceed USD545 million equivalent CNY in order to benefit from a Guarantee covering 100 percent of both Bond principal and potentially unpaid Bond interest. Given Egypt's sovereign is rated at "B" by Standard and Poor's (S&P), Chinese regulators of CIBM have strongly recommended the Bond to be guaranteed by "highly rated" (AAA) institutions with a 100 percent guarantee amount to cover both principal and interest of the Bond. The regulatory and market research to justify the indemnity level was conducted by the Project Team.
- 69. **Waiting Period.** The waiting period for AIIB and AFDB to pay bondholders in the case of a call on the Guarantee is proposed to be 30 business days as per the current practice of regulatory requirement in the CIBM. The actual waiting period is subject to the regulators' approval.
- 70. **Accelerability.** The Operational Policy on Financing Section 4.3.1.(h) states that, Payments by the Bank under a Guarantee are generally not accelerable, however, the guarantee may be accelerable in exceptional cases. The local PRC legal counsel does not exclude the possibility of regulator requiring accelerability on the Guarantee. The Project Team will seek for non-accelerability of the Guarantee, unless required by local regulatory bodies.
- 71. **Overview of the PRC's Panda Bond Market.** There are two markets for the Panda Bond issuances: the CIBM and the Exchange Bond Market (EBM), which includes Shanghai Stock Exchange and Shenzhen Stock Exchange. <sup>28</sup> Specifically, CIBM is governed by the People's Bank of China (PBOC) and the National Association of Financial Market Institutional Investors (NAFMII); whereas the EBM is governed by the China Security Regulatory Commission. <sup>29</sup> Notably, CIBM has majority of the issuance volume in the Panda Bond market, accounting for approximately 81 percent in terms of number of Panda Bond issued up to date. <sup>30</sup> The Bond is proposed to issue under CIBM, given this is the market for sovereign issuances. As such, the Project Team has conducted the following Panda Bond market analysis focusing only on the CIBM.
- 72. The largest four state-owned banks are dominating the CIBM. Up to date, 75 percent of Panda Bonds issued in CIBM have been underwritten by the largest four state-owned banks in terms of number of issuances, and 94.7 percent were underwritten under the purchase-and-sale basis, including all sovereign Panda Bonds issued up to date. All the sovereign issuers have been rated at investment grade and above.

<sup>&</sup>lt;sup>28</sup> The two exchanges utilized for the EBM issuances are Shanghai Stock Exchange and Shenzhen Stock Exchange.

<sup>&</sup>lt;sup>29</sup> Asian Bonds Online. 2019. Exchange Bond Market in the People's Republic of China. Link.

<sup>&</sup>lt;sup>30</sup> Wind database. Data retrieved on July 11, 2023.

- 73. **Development of the CIBM Panda Bond Market.** The first group of Panda Bonds have been issued in 2005 (issuers are ADB and IFC), however, the CIBM has become more active starting in 2016. Since 2005, a total of 328 panda bonds have been issued in CIBM, totaling USD75.6 billion.<sup>31</sup> For year-to-date 2023, a total of 49 issuances have been completed in CIBM, with an issuance amount of USD10 billion in aggregate.<sup>32</sup>
- 74. **Sovereign Issuers in the Panda Bond Market.** So far, only six sovereign governments have issued Panda Bonds in the PRC, and all were in the CIBM market: Hungary, Poland, Philippines, Emirate of Sharjah, Portugal, and Korea. These issuers have large imports from the PRC denominated in CNY, resulting in a demand for CNY funding. These import-related CNY funding needs are also an opportunity to diversify their sources of financing, which are mostly denominated in USD, EUR or local currencies. The same rationale applies to the GOE, which aims to enter CIBM to diversify its funding sources.
- 75. **Regulatory Environment.** As mentioned earlier, CIBM is regulated by PBOC and NAFMII. The issuance approval will normally take four to six months.
  - PBOC: approves the use of proceeds including the remittance of proceeds out of China.
  - NAFMII: reviews all application related documents, consults PBOC for a few critical matters and approves the issuance of bonds.
- 76. **Regulatory Approval Process**. All Panda Bond issuances in CIBM by sovereign or supranational issuers must be reviewed and approved by NAFMII. The review process is initiated by the issuer submitting an application letter to kick off the process and then submitting an application package, which includes documents required by NAFMII. Upon acceptance of the application package, NAFMII will start the review and consult PBOC for a few critical matters. For example, for the use of proceeds. PBOC will then review and provide a green light to NAFMII to approve the bond issuance. This typically takes four to six months. Given Egypt's international credit rating is B, a guarantee provided by one or more "highly rated" (AAA) financial institutions is required on the Bond to provide credit enhancement to the issuer. In addition, the guarantee is required to cover the full amount of the outstanding principal and accrued but unpaid interest of the Bond.

#### B. Economic and Financial Analysis

- 77. **Economic Benefits.** There is strong economic viability for supporting the four Subprojects financed through the Bond, as well as the Private Capital Mobilization of the Bond issuance itself.
- 78. **Fiber to the Home.** The FTTH Subproject, which corresponds to the first phase of the entire program, is expected to improve the standard of living of Egypt's citizens by stimulating economic growth through faster and more stable internet connection. The

<sup>&</sup>lt;sup>31</sup> Wind database. Data retrieved on July 11, 2023.

<sup>&</sup>lt;sup>32</sup> Wind database. Data retrieved on July 11, 2023.

entire FTTH program is expected over an expected roll-out period of five years, to reach up to 7.5 million households and improve network access. For the first two years, the phase one of the FTTH program will connect up to 2.4 million households in Giza, Cairo Nasr City and Madinaty districts. According to the International Telecommunication Union, a 10-percent increase in broadband penetration yields an increase in GDP between 0.25 percent and 1.5 percent. 33 The FTTH program would increase the penetration rate and quality of internet broadband in Egypt, which could add value to GDP growth by the completion of the program. The spread of fiber connection will result in increased faster internet access which will generate employment opportunities, especially through small and medium-sized enterprises, and promotes the development of digital learning and education. Moreover, fiber-based network can achieve greater power efficiency, by consuming 17 times less energy compared with the previous technology and reduce carbon emission, contributing to Egypt's national development strategy toward a more sustainable economy. Based on the implementation agency's analysis, the economic internal rate of return (EIRR) for the FTTH phase one subproject is of 7.7 percent.

- 79. **Alexandria Raml Line 1 Tramway Rehabilitation.** The rehabilitation of the oldest tramway line of the city will double the trains' capacity and frequency. The post-rehabilitation trains will have a capacity of up to 620 person per train compared to 200 to 300 persons currently. Currently, the average realized speed is 11 kilometers per hour (km/h) and will become 22 km/h after the rehabilitation of the line, mainly thanks to the removal of road crossing and elevations. Combined with the installation of an automatic fare collection, the revenue generated by the tramway line should double post-rehabilitation. Based on the implementation agency's analysis, the EIRR for this subproject is of 7.5 percent.
- 80. Cairo Metro Line 1 Rehabilitation. The AIIB-guaranteed Bond proceeds will support alleviating Cairo's traffic congestion problem by improving efficiency and capacity of the metro. It is estimated that Cairo's congestion reduces GDP by as high as four percent annually, representing an economic loss of up to USD8 billion a year. The metro will adopt a more efficient traffic and emergency management system through centralized automatic control. This can lead to an estimated headway efficiency increase of 100 percent. The upgrade in the firefighting system from dry to wet will make the transportation more reliable and resilient to hazards. This is because dry systems typically have a slower response time and a higher failure rate. Post-rehabilitation, Line 1 will have higher capacity and utilization, which will improve its economic efficiency and sustainability. Based on the implementation agency's analysis, the EIRR for this subproject is of 8.4 percent.
- 81. **Cairo Metro Line 2 Rehabilitation.** The Cairo Line 2 Rehabilitation subproject also helps reduce traffic congestion. Upgrade in the control system of the line will increase line efficiency through reduction of headway leads. Through this, energy efficiency as high as 25 percent can also be achieved. Furthermore, the study has also shown that the construction of a metro line/station results in population growth and contributes to GDP and employment opportunities. As a result, the Line 2 subproject will

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<sup>&</sup>lt;sup>33</sup> International Telecommunication Union. 2012. The Impact of Broadband on the Economy: Research to date and policy issues. Link.

enhance urbanization and economic development in the region. Based on the implementation agency's analysis, the EIRR for this subproject is of 8.9 percent.

- 82. **Debt Sustainability.** The Project Team conducted a debt sustainability assessment of Egypt. Macroeconomically, Egypt is currently under stress due to specific vulnerabilities, external shocks and policy implementations. The Debt Sustainability Analysis concludes that Egypt's public debt is in principle sustainable, albeit subject to high and increasing risks, related to the high level of debt and high gross financing needs. Specifically, this is a liquidity squeeze, whereby the stock of foreign reserves plus access to additional external funding is deemed low in relation to upcoming external payments. The foreign exchange (FX) market is not functioning efficiently, leading to occasional FX shortages.
- 83. Ultimately, Egypt aims to access international capital markets regularly in order to dissipate debt sustainability concerns. This is in principle possible, as there is track record, and will depend on restoring investors' confidence in that government's policies can deliver macroeconomic stabilization, and, in the medium term, improve the environment for the private-sector-led growth, investment and export. Visible progress on the IMF program, including restoring the credibility of the exchange rate policy, would be an important step forward. In this regard, the Project will contribute to opening a new international capital market for Egypt.
- 84. **Repayment Plan.** As described above, the Subprojects being supported under the Project are embedded in its medium-term sustainable development plan of Egypt, serving general economic development goals and programs. As such, when the Bond matures in three years, the GOE expects to repay the Bond through refinancing or fiscal budget. It aims to gain international market access and strengthen investor relations through the issuance of the Bond, as it continues to privatize state-owned enterprises and to diversify its sources of funding.<sup>34</sup>

# C. Fiduciary and Governance

- 85. **Procurement.** The AIIB Procurement Policy (as revised through Nov. 22, 2022) and the specific provisions for guarantees of the Procurement Instructions for Recipients (PIR) (June 2, 2016) apply to the Project. According to footnote 1 of the PIR (June 2, 2016), the directive does not apply to contracts financed under a guarantee by the Bank under a sovereign-backed guarantee. For such contracts, the Bank satisfies itself that contracts are (a) procured in a manner so as to enable the Recipient to carry out the Project diligently and efficiently; (b) are of satisfactory quality and compatible with the other parts of the Project; (c) are delivered or completed in timely fashion; and (d) are priced so as not to affect adversely the economic and financial viability of the Project.
- 86. **Procurement Activities under the Project.** AllB-guaranteed Bond proceeds will finance procurement under four Subprojects. Under the Line 1 Subproject, procurement includes goods, works and services for construction and rehabilitation of the metro line, renewal of the signaling, electrical, power supply, central control, mechanical and telecommunication systems, etc.; under the Line 2 Subproject,

<sup>&</sup>lt;sup>34</sup> EMOF, Project Team due diligence meetings. June 2023.

procurement includes goods, works and services for upgrading and replacement of signaling, power supply, control, electromechanical systems and civil works to shorten the operational headway, upgrade the existing rolling stock to include updated on-board communication systems and introduce innovative features to improve performance and reliability; under the Tram Subproject, procurement includes goods, works and services for rehabilitation of the tramline, purchase of new rolling stock, etc.; and under FTTH Subproject, procurement includes goods, works and services for replacing the existing ADSL or other DSL-based network infrastructure with state-of-art fiber GPON infrastructure.

87. Assessment of Applicable Procurement Policy and Requirements Governing Daily Implementation. The Bond will be used as domestic funding contribution to finance procurement of the Subprojects. The FTTH Subproject will be solely financed by the GOE, while the remaining Subprojects will receive financing from both international financial institutions (IFIs) and the GOE. Table 9 provides a list of applicable procurement policies and requirements governing daily procurement implementation under their respective Subprojects.

Subproject **Applicable Procurement Policy** FTTH Subproject Telecom Egypt Procurement Policy Tram Subproject European Investment Bank (EIB) procurement policy for EIB-financed procurement. AFD procurement policy for AFD-financed procurement. NAT: National procurement policy for domestic funds financed procurement. Line 1 Subproject EBRD procurement policy for IFI-financed procurement. NAT: National procurement policy for domestic fundfinanced procurement. EIB procurement policy for IFI-financed procurement. Line 2 Subproject NAT: National procurement policy for domestic fundfinanced procurement.

**Table 9. Summary of Procurement Policies** 

- (i) EBRD: The Procurement Policies and Rules (PPR) (May 15, 2022) governing the procurement of goods, works, services and consultancy services contracted by the Client in projects financed by EBRD in both the public and the private sector. PPR general principles and considerations are consistent with AIIB's Procurement Policy and PIR in terms of value for money, fit for purpose, economy, efficiency, effectiveness, transparency, fairness, sustainability and integrity. Its public procurement requirements follow WTO GPA, UNCITRAL Model Law on Public Procurement and other good international practices. Open competitive bidding is the default procurement method with the flexibility of using other methods supported by appropriate justifications. Procurement-related complaints handling follow EBRD required procedures.
- (ii) **EIB:** The Guide to Procurement for Projects Financed by the EIB applies to EIB-financed procurement. It requires projects located within the European Union (EU), and Candidate Countries follow EU law on procurement, especially EU

procurement directives concerning competitive tendering; for projects outside EU, it requires the main mechanisms of the EU Directives on procurement be followed, with the necessary procedural adaptations. Principles of the EU Directives are consistent with the AIIB procurement policy and PIR in terms of competition, nondiscrimination, equal treatment and transparency. Open and restricted procedures with publication on Official of the European Union are the preferred procurement methods. EIB's role is to ensure that procurement requirements (projects inside EU) or relevant criteria for proper management of financing (projects outside EU) are respected, and that procurement process is fair and transparent and the tender selected is economically the most advantageous.

- (iii) AFD: The Procurement Guidelines for AFD-financed Contracts in Foreign Countries applies to AFD-financed procurement, which are consistent with AIIB procurement policy and PIR in terms of open competition, transparency, economy, efficiency and integrity. Monetary thresholds were set for respective procurement methods.
- (iv) NAT: Law No. 182 of 2018 Regulating Contracts Entered by Public Entitles (New Law) applies to supply, service and construction contracts financed fully by domestic funds. It provides procurement principles like fairness, competition and transparency. By regulating the procurement procedures from procurement planning to contract implementation, it aims to achieve efficiency and effectiveness of public expenditures. <sup>35</sup> The policy was found sound and acceptable, in general.
- (v) Telecom Egypt: The Procurement Policy apply to procurement and sale system in the company. The procurement function is centralized with its procurement department for all procurement in all sectors except some exemptions with sound justification. Different procurement methods are provided to meet different business needs: tender and public practice/bidding, limited tender and practice, local tender and practice, direct purchase, framework agreement, rental and resale, etc. Market engagement, procurement notice of wider circulation and measures to avoid piecemeal purchase are good practice to follow. The procurement complaints, which are raised through official channels, will be reviewed, examined, and managed by the relevant grievances management department.
- 88. In summary, the policies applicable to the respective Subprojects ensure compliance with AIIB core procurement principles, supporting procurement to be carried out in a timely, efficient, economic and effective manner to satisfy AIIB's policy requirements for Bond-guaranteed Subprojects. Nonetheless, the proposed procurement risk mitigation measures provided in the section on e-risks and mitigation measures should be implemented to ensure the achievement of project objectives.
- 89. **Financial Management.** The expenditures of the Subprojects will be allocated within national annual budget, implemented by the SPIU and IAs. The EMOF makes the

<sup>&</sup>lt;sup>35</sup> Egypt Country Partnership Framework for the Period of FY2023-FY2027. World Bank. 2023. Link.

allocation and utilization details of the Subprojects on adoption by the legislature. The capacity of the PIUs is assessed to be adequate for managing the financial management aspects of the Subprojects. The external audit will be conducted for the expenditure as part of the Subprojects' reporting mechanism.

- 90. Subprojects related to urban transport are carried out by the NAT, a state-owned agency under the supervision of the MOT. These projects receive financing from the EIB, EBRD and AFD, with a portion of the project fund provided by government counterpart funds that are planned to be supported by the Bond issuance under SSFF. In compliance with the requirements of the MDBs, regular periodical progress reports, including financial and technical progress, shall be submitted for review. In addition, the projects' accounts are subject to auditing by the Supreme Audit Institute, also known as the Accountability State Authority, on an annual basis. The audit reports will be submitted to the EMOF and all MDB co-financiers within the agreed timeline.
- 91. The FTTH Subproject will be implemented by Telecom Egypt. The project will be financed through government counterpart funds administered by the Ministry of Communications and Information Technology (MCIT). Telecom Egypt has consistently published annual audit reports and quarterly unaudited report. The available audited reports are prepared by KPMG and published with an unmodified (clean) opinion. The project expenditure will be reflected in the audited financial statement on an annual basis.
- 92. **Governance and Anticorruption.** AllB is committed to preventing fraud and corruption in the projects it finances. For this Project, AllB's Policy on Prohibited Practices (2016) shall apply.
- 93. **Institutional Capacity.** Egypt has a high institutional capacity and has been working with IFIs for several decades through multiple projects and instruments. The Project's implementation arrangements are appropriate to achieve the Project objectives. Egypt has experience in implementing projects financed by commercial debt instruments and guaranteed by the Multilateral Investment Guarantee Agency. Throughout the project preparation, the GOE has demonstrated its commitment to understand AIIB's applicable policies and requirements for the Project, and to ensure its successful compliance.
- 94. Financial Crime and Integrity (FCI) and Counterparty Due Diligence/Know Your Counterparty (CDD/KYC). Applying AIIB policies and guidelines, KYC/FCI due diligence has been carried out to assess financial crime risks, including money laundering and financing of terrorism (ML/FT) risks, sanction risk and risk deriving from integrity unsoundness when dealing with its counterparties and connected parties in the financing. Integrity screenings have been performed on the state representatives of the GOE, EMOF, as well as senior management of Ministry of International Cooperation, MOT, MCIT, Telecom Egypt and NAT (including the potential authorized persons to sign financing agreements with AIIB). Due to their public status, they are identified by Word-Check One as politically exposed persons. No critical findings about the identified politically exposed persons came out of the screenings.

#### D. Environmental and Social Considerations

- 95. **Environmental and Social Policy and Categorization.** AllB's Environmental and Social Policy (ESP), including the Environmental and Social Exclusion List and Environmental and Social Standard 1 and 2, will apply to this Project. The Project has been placed in Category B. None of the Project's underlying subprojects fall under AllB's Environmental and Social Exclusion List. None of the subprojects is related to or associated with coal mining, coal transportation, coal-fired power plants and with any infrastructure services exclusively dedicated to support any fossil-fuel-related activities.
- 96. **Environmental and Social Instrument.** AIIB has reviewed all the applicable E&S instruments for the subprojects during project due diligence and confirms that the Subprojects are compliant with the Bank's Environmental and Social Framework (ESF). As the Bond has a three-year maturity, which gives AIIB less room for preparation work, AIIB and the EMOF have agreed to support subprojects that were prepared/implemented per other MDBs' E&S standards, or at a low E&S risk, and which will be implemented by high-capacity entities with a well-established and functioning Environmental and Social Management System (ESMS).
- 97. Subprojects related to urban transport (rehabilitation of Alexandria Tramway line, and Cairo 1 and 2 metro lines) are implemented and managed by the National Authority for Tunnel (NAT), a government agency under Ministry of Transportation. For Cairo Metro Line 1 and Line 2 rehabilitation, the EBRD and EIB have provided E&S technical support to NAT and Egypt Cairo Metro, the metro operator. E&S due diligence with detailed E&S Action Plan has been prepared by an independent consultant. The EBRD and EIB also provide safety management system capacity-building support for NAT and Egypt Cairo Metro. For the Alexandria Tram rehabilitation project, NAT has prepared the Environmental and Social Impact Assessment (ESIA), Resettlement Policy Framework and Stakeholder Engagement Plan align with EIB standard in 2022 and is finalizing the Resettlement Action Plan. ESMP has been included in Subproject bidding document.
- 98. The FTTH Subproject is the phase one of a nationwide program focusing on Giza and Cairo areas for digital connectivity of end-use residential customers. The subproject will be implemented over a two-year period, with an objective to connect up to 2.4 million households in the Cairo and Giza areas to high-speed internet by replacing existing copper cables with a new fiber infrastructure using GPON protocols. The FTTH program will be managed by MCIT and will be implemented by Telecom Egypt.
- 99. The E&S instrument applicable for this Subproject is the ESMS put in place and applied by Telecom Egypt. The PT has confirmed upon review, and upon discussing with Telecom Egypt, that the ESMS at present is sufficient to identify, assess and mitigate any E&S risks and potential adverse impacts, and in compliance with the Bank's ESF. The FTTH Subproject will have limited adverse impacts, mostly of temporary character and associated with minor noise/traffic disturbance, or with dust pollution at limited and localized scale. E&S risks are low and associated with H&S and labor and working conditions. AllB will monitor the effectiveness and efficiency of the ESMS during implementation of the FTTH Subproject and agree on any corrective actions, if and where needed, with the MCIT and Telecom Egypt.

- 100. **Sustainable Finance Framework.** The EMOF launched the SSFF in November 2022 during COP27. The framework introduced Egypt's strategy for sustainable development, and efforts to address climate change. The other five key components of the framework are as follows:
  - (i) <u>Use of Proceeds.</u> The use of proceeds will be allocated to eligible sectors including (i) green: clean transportation, renewable energy, energy efficiency, climate adaptation, pollution control, sustainable water management and wastewater management and others; and (ii) social: affordable basic infrastructure, access to essential services, affordable housing and others.
  - (ii) <u>Project Evaluation and Selection.</u> Egypt will utilize the existing Sustainable Finance Working Group, which consists of 22 ministries chaired by the EMOF, to carry out evaluation and selection process. The working group will identify and review all proposed eligible use of proceeds.
  - (iii) Environment and Social Risk Mitigation. The Egypt Environmental Affairs Agency will be responsible for laying down the plans for protecting the environment following the national Environmental Law. All eligible projects under the SSFF will be evaluated for their E&S impact by a certified consultant and submitted to the Egypt Environmental Affairs Agency for its opinion.
  - (iv) <u>Management of Proceeds</u>. The EMOF will manage the net proceeds of each sustainable debt instrument deposited in the general funding accounts and earmarked for allocation in the Sustainable Finance Register. The EMOF and the Ministry of Planning and Economic Development will oversee the allocation and tracking of eligible expenditures up to an amount equal to the net proceeds.
  - (v) <u>Reporting</u>. An annual allocation and impact report will be published. The report will disclose amounts allocated to various eligible subprojects, unallocated amount, and subproject-level impact, including estimated annual energy savings, carbon dioxide emissions avoided, number of households gaining access to high-speed internet connectivity, etc. The SSFF has been provided a secondparty opinion by Moody's on Nov. 9, 2022.

# 101. Environmental and Social Characteristics

- 102. **Urban Transportation Subprojects.** The AIIB-guaranteed Bond proceeds will support rehabilitation of track and power infrastructure, signaling, telecommunication and electromechanical system rehabilitation in station facility for Cairo Metro Line 1, as well as replacement of signaling, safety, power, control and electromechanical systems for Cairo Metro Line 2. All retrofits will be done during the night to avoid the normal operation of the metro. Disturbances during the construction phase are anticipated to be minimal. Those activities will generate site-specific E&S risks and adverse impacts, which can be addressed through implementation of the ESMS.
- 103. The Alexandria Tramway rehabilitation encompasses full replacement of existing tramway lines, their signaling and power supply infrastructure, replacement of the rolling stock, replacement of the existing depot and some elevation in the areas of street crossings. These rehabilitation works encompass some construction works with

potential negative impacts to the community of a temporary character. These include noise and dust during construction, traffic flow disruptions and potentially some impact on cultural heritage. The Project will involve some private land acquisition of limited scale as the rehabilitation will follow the existing alignment of the tramway lines. A limited number of local grocery shops will be permanently affected. A resettlement policy framework has been prepared and disclosed. A detailed resettlement action plan will be finalized before end of year.

- 104. **Digital infrastructure Subproject.** The FTTH Subproject, to be implemented by Telecom Egypt, under the supervision of MCIT, is associated with limited and very low level of adverse E&S impacts, of short-term and temporary character during cable laying, and include local and short-term traffic disruptions for the neighborhood where cabling works are conducted.
- 105. Climate Change Risks and Opportunities. Egypt is vulnerable to the impacts of climate variability and change, particularly with respect to water security, agriculture and livestock, and increasingly adverse conditions to health, human settlements and energy demand and supply. Egypt's nationally determined contribution is consistent with the nation's overall goals of reducing vulnerability and poverty, and achieving long-term sustainable, economic development. Key areas of focus include the sustainability of the environment, water resources, energy, sustainable land management, agriculture and health.<sup>36</sup> All Subprojects have been assessed for exposure to physical climate risks as part of the environmental due diligence process. Subprojects in the urban transportation sectors have considered climate risks and included resilience measures as follows: (i) Cairo Metro lines (No. 1 and No.2) have been assessed as exposed to flood risks. Reflecting on these risks and in order to improve climate resilience, the project technical design has been amended with improved drainage system. It will be implemented by the future selected contractor. (ii) Alexandria tramway line is exposed to earthquake and flooding risks. For risks that have been identified during the ESIA process, climate resilience measures have been proposed such as an increase in the height of the platform, design of drainage system with consideration of flooding risk and improved electrical power operation control. The last Subproject (FTTH) is considered as having low physical climate risk exposure, being spread across multiple locations through diversified network in different regions. Therefore, all Subprojects are considered Parisaligned for BB2.
- 106. Occupational Health and Safety. For all transportation subprojects, a project-specific Health and Safety Management Plan will be prepared. One of the key considerations is to the safety for workers for Cairo Metro, as implementation will take place while metro operation is ongoing. A safety management plan will be developed to prevent accidents. The Health and Safety Management Plan is part of contractual obligation for construction contractors. An ongoing technical assistance aims to improve NAT and Egypt Cairo Metro's capacity on health and safety management.
- 107. **Gender and Inclusive Impact.** The Alexandria tramway line and Cairo Metro rehabilitation Subprojects offer a gender positive impact as these projects will provide

<sup>&</sup>lt;sup>36</sup> World Bank. 2021. Egypt Country Profile. Link.

access for safe, efficient, affordable and clean transportation for women, children, and low-income social groups. Each train will provide at least one quarter of its capacity as women-only carriage. The project also encourages women to be employed by the implementation company, although the social perception for construction work is not women friendly.

- 108. **Stakeholder Engagement, Consultation and Information Disclosure.** The Bond will follow the disclosed SSFF and disclose an Annual Impact Bond report. For all the transportation sector Subprojects, the necessary E&S instruments, including ESIA and ESMP, have already been disclosed in English and Arabic on various MDB websites for Alexandria Raml Tram, Cairo Metro Line 1 rehabilitation and Cairo Metro Line 2 rehabilitation, as well as information about the FTTH Subproject, including on E&S aspects. Telecom Egypt has disclosed a link of the ESMS, applicable for the FTTH Subproject. <sup>37</sup> All these documents will also be disclosed on AIIB's website with an introduction to the ECM of the EMOF. The ECM will provide further information on E&S instruments developed for individual investments with support from other MDBs' websites<sup>38</sup>.
- 109. **External Communication Mechanism (ECM).** The EMOF has disclosed its External Communication Mechanism to register complaints. For transportation Subprojects, grievance redress mechanisms (GRMs) have been established at project level for Alexandria Tram<sup>39</sup> and Cairo Metro.<sup>40</sup> For the FTTH Subproject, Telecom Egypt has established a fully functional GRM as part of their ESMS. The GRM has been developed with the help of an international environmental, social and governance consultant in accordance with industry good practice, based on the IFC E&S standards, and is aligned with AIIB's ESF.
- 110. **AIIB Independent Accountability Mechanism**. The Bank's Policy on the Project-affected People's Mechanism (PPM) applies to this Project. The PPM has been established by AIIB to provide an opportunity for an independent and impartial review of submissions from project-affected people who believe they have been or are likely to be adversely affected by AIIB's failure to implement its Environmental and Social Policy in situations when their concerns cannot be addressed satisfactorily through the project-level External Communication Mechanism or the processes of AIIB Management. Information on the PPM is available on AIIB's website.<sup>41</sup>
- 111. The Project Team has agreed with the EMOF that upon the Bond settlement and upon public disclosure on the Guarantee, provided by AIIB under the Project, the EMOF will publish a link to the Bank's PPM. Furthermore, the three agencies responsible for implementation of the four Subprojects will publish on their websites a reference to the website of the EMOF and particularly to the section referring to the Project.
- 112. **Monitoring, Supervision and Reporting Arrangements.** During Project implementation, independent E&S monitoring reports on all three transportation

<sup>&</sup>lt;sup>37</sup> Telecom Egypt. Corporate Environmental and Social Management System. Link.

<sup>&</sup>lt;sup>38</sup> Apply to the three green transport Subprojects.

<sup>&</sup>lt;sup>39</sup> Alexandria Passenger Transportation Authority. Comments and Complaints. Link.

<sup>&</sup>lt;sup>40</sup> Cairo Metro. Contact Information. <u>Link.</u>

<sup>&</sup>lt;sup>41</sup> AIIB. How We Asist You – Project-affected People's Mechanism. Link.

Subprojects will be shared with AIIB. The progress of implementation of the FTTH Subproject, including on E&S aspects, will be reported by Telecom Egypt as the implementation agency as part of the a) environmental, social and governance corporate reporting by Telecom Egypt and b) as part of the Bond reporting of impacts in compliance with the ICMA green bond principles.

### E. Risks and Mitigation Measures

113. Based on the assessment, discussions with the EMOF and other key stakeholders and review of available documents, the Project Team has assigned an overall "Medium" risk rating to the project.

Risk Description	Assessment Ratings (High, Medium, Low)	Mitigation Measures
Sovereign Risk  In the short-to-medium term, Egypt is exposed to economic uncertainty and liquidity stress, triggered by geopolitical tensions, which has resulted in a sudden increase in risk premia. This has further led to:  i. A flight of capital.  ii. Depreciating currency as Egypt transitions to a free-floating exchange regime.  iii. Elevated debt-to-GDP.  iv. High inflation.  With this economic backdrop, all three international rating agencies have revised the sovereign rating or outlook for Egypt, specifically:  i. Moody's placed Egypt 'B3' ('B-'equivalent) ratings on "Review for Downgrade" on May 9 to reflect the sovereign's increasing liquidity and debt affordability risks. Slower than anticipated progress with the state-owned asset sale strategy, a key component of the 46-month IMF program that started in December 2022, risks undermining Egypt's financing plans, weakening the	High	An IMF program is in place to anchor macroeconomic stabilization and catalyze additional official financing. The GOE has broadly implemented policies appropriate to the economy's situation and has also demonstrated commitment to adhere to the three pillars recommended by IMF to stabilize its economy in the long term. The three pillars are:  i. A floating currency regime, which will make Egypt's economy more resilient by helping to absorb external shocks. Floating the exchange rate carries risks, due to high pass-through to inflation, and needs to be implemented carefully, with sufficient reserves to mitigate risks.  ii. Gradual fiscal consolidation that would lead to a lower debt-to-GDP ratio. The FY2024 budget is targeting a primary surplus larger than envisaged by the IMF program. Also, the GOE has been successfully extending the average maturity of public debt and plans to continue doing so.  iii. Increase in net foreign direct investments through more privatization. As part of this strategy, the GOE is trying to diversify its funding sources (as supported by the Project) and increase its presence in the private financing avenue. For FY2023, the GOE has signed privatization deals worth USD1.9 billion.

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and eroding confidence in the currency.  ii. Fitch downgraded Egypt's rating to 'B' and maintained the negative outlook on May 5. External financing risk have increased given high external financing requirements, constrained external financing conditions and the sensitivity to investor sentiment, amid a background of high uncertainty on the exchange-rate trajectory, and reduced external liquidity buffers.  iii. S&P revised the outlook of the 'B' rating to negative on April 22 on rising external financing risks. Delays to currency and structural reforms have put pressure on the EGP, increasing the risk for the government and the broader economy of further sharp currency devaluations.		It is expected that investor and business confidence improve gradually once there is critical progress on the above dimensions. Generally, the GOE has a good track record of prudent macro policies, implementing past IMF stabilization programs, and unwinding imbalances much larger than currently.  Furthermore, Egypt has a solid experience working with multilaterals and continues to be in good relations with the various IFIs. It also enjoys very strong support from Gulf Cooperation Council countries and a strong partnership with the PRC.  AIIB's preferred creditor status is expected to be a strong factor in favor of protecting the debt service on the bond financing this Project, should such concerns arise.
Refinancing Risk  Given that the Bond has a bullet structure with a three-year maturity, full repayment of Bond principal is expected in year 2026-2027.	High	At Bond maturity, GOE can repay through refinancing or fiscal budget, where the refinancing risk can be mitigated through the points described as follows:  i. Egypt has shown effort to boost its fiscal revenue through increase in tourism revenue as the member slowly recovers from COVID.  ii. It also aims to increase fiscal revenue through increases in tax revenue, Suez Canal revenue and non-oil exports.  iii. Furthermore, the GOE has demonstrated commitment in diversifying its sources of funding to unlock future opportunities in the capital market. With this potential, the GOE can refinance by tapping on the PRC capital market or possible other capital markets it has access to at the time.  iv.
Technical Risk  Low quality of the Subprojects design.	Low	Post-delivery monitoring will be conducted on every Subproject to ensure the highest quality of the design and construction. This includes onsite visit by AIIB Project Team during the three years of implementation.  If other projects were to be selected, the
		eligibility criteria will select Subprojects co financed with other IFIs with similar standards

		as AIIB to ensure high technical and design standards.
Implementation Risk  The Project will be a first time for Egypt as an issuer in the PRC bond market. This may lead to a lack of confidence in investor sentiment due to unfamiliarity to the structure and the Issuer.  The Subprojects will be implemented by two separate SPIUs. The two SPIUs may have varying degrees of experience working with MDBs. This may lead to inconsistencies in implementation and oversight of MDB requirements.	Medium	The implementation risk is expected to be mitigated by the following:  i. The EMOF has demonstrated strong commitment to the Project, given its strategic importance to the member. As the Bond will be issued under the SSFF, it has dedicated significant resources to ensure proper implementation and satisfactory monitoring of the Subprojects.  ii. AIIB and AFDB involvement and disclosures will help investors access adequate information to successfully issue the Bond and mobilize private capital.  iii. The two SPIUs of the Subprojects both have extensive experience working with MDBs, on project or technical assistance programs.  iv. The three Subprojects under the transportation sector have secured financings from other MDBs, including EIB, EBRD and AFD. Technical assistance and implementation knowledge is specifically provided to the Subprojects to streamline implementation process.
Operational and Maintenance Risk  After Subproject completion, there may be a risk associated with the willingness of the SPIUs to introduce a long-term contract with a counterparty to perform operational and maintenance work.	Medium	Out of the four Subprojects, three green transport projects have appointed companies that will be responsible for the operation and maintenance work post project completion. For FTTH Subproject, the maintenance is very low and well-practiced by Telecom Egypt.
	High	
Environmental and Social Risk  Client's capacity to prepare and operationalize E&S instruments during short maturity of the Bond.	Medium	AIIB will only support Category B green transport Subprojects that have been prepared and implemented per MDB E&S standards with risks assessed and well managed. The FTTH is a low-risk Subproject. AIIB will monitor compliance with the Bank's ESF and the ESMS used by Telecom Egypt during implementation
Financial Management Risk  Major deficiencies in internal controls and noncompliance with core rules and regulations that the AIIB PDG payments have not been used for eligible purposes.	Medium	AIIB will regularly review the progress report of Subprojects as well as annual external review report on the financial status and the use of funds during implementation.

#### **Procurement Risk**

Depends on the source of funds, and the agreement among IFIs and the GOE, EBRD, EIB, AFD and national/agency procurement policies and requirements apply to the four Subprojects under AIIB guaranteed Bond. The identified procurement risks are (i) implementing agency's procurement capacity of applying IFIs and national procurement policies and procedures; (ii) deviation from IFIs and national/agency procurement policies and requirements; (iii) implementation delay, substandard quality and substantial cost overrun; and (iv) any procurement-related prohibited practices.

#### Medium

The proposed risk mitigation measures are (i) implementing agency staff to participate IFIs and national/agency procurement training; (ii) preparing a procurement manual or a similar document guiding implementation; (iii) carrying out risk-based procurement review and monitoring; and (iv) monitoring and reporting procurement- related prohibited practices.

In case of identified deviations from applicable policies and requirements, the PIU housed with the EMOF will follow up with the respective IFIs and government authorities to take remedy measures provided in the governing policies.

## F. Deferral of Disclosure of Project Summary Information and Project Document

119. In the light of Section 3.5.7 of the Operational Policy on Financing, para. 67 of AIIB's ESF<sup>42</sup> and Section E.15.(a) of the Directive on Sovereign and Non-Sovereign Financing,<sup>43</sup> Management has granted a deferral of disclosure of the Project Summary Information and Project Document for this Project until the settlement of the Bond for this operation, due to legal and regulatory requirements relating to securities offerings, given that premature disclosure would compromise the regulatory review and approval. As this Project involves a security offering in the form of the private placement, the information contained in the Project Summary Information and Project Document is non-public and will not be disclosed until the bond issuance. Once the bonds are settled, both Project Summary Information and Project Document will be promptly disclosed.

<sup>&</sup>lt;sup>42</sup> AIIB. Environmental and Social Framework Approved February 2016 (Amended February 2019, May 2021 and November 2022). Link.

<sup>&</sup>lt;sup>43</sup> Provides that the Investment Committee may grant a deferral of the publication of the Project Summary Information in the case of "legal or other regulatory requirements such as timing requirements relating to securities offerings."

**Annex 1: Results Monitoring Framework** 

Project Objective:	To support Egypt's of mobilizing private ca	•				s of green trar	nsport and digital in	nfrastructure by
Indicator Name	Unit of measure	Baseline Data Year	Cumul	Cumulative Target Values		End Target	Frequency	Responsibility
			YR1	YR2	YR3			
Project Objective Indicators:								
Number of households (home passed) with affordable access to internet and digital services	million households	2023	1.2	2.4	2.4	2.4	Annual	EMOF
2.Kilometers of rail lines rehabilitated/upgraded	km	2023	16	32	48	48	Annual	EMOF
3. Greenhouse gas (GHG) emission reductions of green transport subprojects <sup>44</sup>	Ton of carbon dioxide (CO <sub>2</sub> ) equivalent	2023	0	0	0	478,000 45	Annual	EMOF
4. Greenhouse gas emission reductions of Fiber to the Home (FTTH) phase one	Ton of CO <sub>2</sub> equivalent	2023	124.79	249.58	249.58	249.58	Annual	EMOF
Intermediate Results Indicators:						-		
Direct private capital mobilized	USD	0 2023	200	0	0	200	Annual	AIIB

 <sup>44</sup> It is assumed that no GHG emission reduction will be generated during the construction of the projects.
 45 Annual GHG emission reduction after the subprojects are completed (five years after bond issuance).

Project Objective:		o support Egypt's development of sustainable infrastructures in the areas of green transport and digital infrastructure by obilizing private capital through AIIB's Partial Debt Guarantee (PDG).						
Indicator Name	Unit of measure	Baseline Data Year	Cumulative Target Values			End Target	Frequency	Responsibility
			YR1	YR2	YR3			
2. The Government of Egypt's percentage of CNY-denominated bonds outstanding amount (USD equivalent)/ total foreign-issued bonds outstanding (USD equivalent)		0% <sup>46</sup> 2023	1.6	1.6	1.6	1.6	Annual	EMOF

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<sup>&</sup>lt;sup>46</sup> Per Bloomberg as of July 13, 2023, the GOE has a total outstanding amount in foreign-issued bonds of USD30.5 billion.

# Annex 2: Eligibility Criteria and Alignment of Subprojects with Egypt's Sovereign Sustainable Financing Framework

The issuance of up to USD500 million equivalent CNY sustainable Panda Bond will support four Subprojects that have been selected by the Egyptian Ministry of Finance (EMOF) and AIIB and that are aligned with Egypt's Sovereign Sustainable Financing Framework (SSFF). If any of the selected Subprojects would need to be replaced over the life of the Project, for noncompliance with AIIB policies or because of implementation delays, the following criteria would serve as the basis for eligibility, on top of a review by AIIB.

The Subprojects were selected with the EMOF based on the following criteria:

- Eligible under Egypt's SSFF (first column in the table).
- Aligned with AIIB's mandate (second column in the table).
- Medium and low environmental and social (E&S) risk categories (No Category A).
- Aligned with AIIB Operational Policies.

SSFF Eligible Categories	Aligned with AllB Mandate	Proposed Pipeline
	Green categories	
Clean transportation	Yes	<ul> <li>Alexandria Tram El Raml Rehabilitation (Victoria station - El Raml)</li> <li>Cairo Metro - Line 1 rehabilitation</li> <li>Cairo Metro - Line 2 rehabilitation</li> </ul>
Renewable energy	Yes	
Pollution prevention and control	Yes	
Energy efficiency	Yes	Fiber to the Home (FTTH)
Climate change adaptation	Yes	
Sustainable water and wastewater management	Yes	
Terrestrial and aquatic biodiversity conservation	Yes	
	Social categories	
Affordable basic infrastructure	Yes	
Access to essential services – financing and financial services	No	
Access to essential services -	Yes – limited to	
education and vocational training,	infrastructure financing	
healthcare	Yes – limited to	
Affordable housing	infrastructure	

Socioeconomic advancement and	No	
empowerment		
Micro, small and medium-sized	No	
enterprise or MSME financing to		
support employment generation		
and/or alleviate unemployment		
Food security and sustainable food	No	
systems		

#### **Annex 3: Egypt Sovereign Credit Fact Sheet**

- 1. **Background**. Egypt is a lower-middle-income nation, with a population of around 104 million and income per capita of around USD4,500, strategically located between Asia, Africa and Europe. The economy is relatively well diversified, self-sufficient in energy, and earns large amounts of foreign exchange from tourism and remittances. A legacy of heavy state involvement in the economy has resulted in low external competitiveness and private sector weaknesses.
- 2. Following a macroeconomic crisis in 2016, the authorities, supported by an IMF program, made a decisive turnaround in economic management. They devalued the currency, tightened the monetary policy, reduced inflation and achieved a remarkable fiscal consolidation, including by reforming fuel subsidies. Subsequently, growth has returned—driven by increased gas production and public sector investment—public debt has stabilized and FX reserves recovered. However, the economy remained dependent on external financing.

Key Economic Indicators	FY20	FY21	FY22	FY23*	FY24*	FY25*
GDP growth 1/	3.5	3.3	6.6	3.7	5.0	5.5
Inflation 1/	5.7	4.5	8.5	21.6	18.0	9.4
Budget overall balance	-7.5	-7.0	-5.8	-7.6	-9.2	-8.6
Public debt 2/	86.2	89.9	88.5	92.9	87.0	85.4
Gross public financing needs	32.4	43.2	31.1	28.8	30.2	36.9
Current account balance	-2.9	-4.4	-3.5	-2.8	-3.1	-2.9
External debt	32.3	32.6	32.8	35.8	34.8	32.6
Gross external financing needs	8.5	6.9	7.8	5.6	5.6	5.6
Gross international reserves (USD billion)	37.2	39.4	31.5	34.8		
Exchange rate (EGP/USD) 3/	16.1	15.7	18.8	30.9	30.9	

Source: IMF country report 23/2 and WEO Apr 2023; in percent of GDP unless stated otherwise; FY is July-June.

Notes: 1/ percent change, year-on-year, average; 2/ IMF definition; 3/ data from the central bank, end of period; for FY24 as of July 2023.

- 3. **Recent Developments**. The economic impact of the COVID-19 pandemic was less than feared. A large IMF program helped maintain confidence and Egypt avoided a recession. The economy was still going strong in FY2022, with growth of 6.6 percent thanks to strong manufacturing.
- 4. However, the geopolitical tensions in early 2022 caught Egypt off-guard, as risks have materialized simultaneously in key vulnerability areas. The heightened global risk aversion and the flight to safety led to large capital outflows. Also, because of Egypt's dependence on wheat from Ukraine and Russia, the disruptions due to the geopolitical tensions threatened Egypt's food security and social stability. Finally, the relentless tightening of global monetary conditions in 2022 have put pressure on Egypt's external finances.
- 5. These events rendered untenable Egypt's strategy to finance high external deficits with portfolio inflows at a stabilized, now-overvalued exchange rate. Despite financial support from the Gulf Cooperation Council region, international reserves declined sharply, from USD39.4 billion in FY2021 to USD31.5 billion in FY2022, confidence evaporated, debt markets shut off for Egypt and faced FX shortages. The authorities turned to the IMF for support.

- 6. The IMF program commenced in December 2022. Meanwhile, in the run-up to the program and in response to the crisis, the authorities have (i) devalued the Egyptian pound, which, as a result, lost 50 percent of its value, since March 2022; (ii) hiked policy interest rates cumulatively by 1,100 bps to stem depreciation and contain inflation; (iii) announced a two-percent-of-GDP relief package to mitigate the cost-of-living crisis' impact on the vulnerable population groups.
- 7. The new, 46-month IMF program is relatively small (USD3 billion) but is meant to catalyze additional financing from multilateral and bilateral partners, including—importantly—large foreign direct investments from Gulf Cooperation Council governments into Egypt's new, large privatization scheme. The IMF program focuses on (i) a flexible exchange rate and monetary policy to reduce inflation; (ii) continued fiscal discipline centered around revenue mobilization; (iii) a structural reform program aimed at reducing the state's footprint in the economy, by reforming state enterprises, leveling the playing field for the private sector, divesting state assets and improving governance.
- 8. **Outlook and Risks**. Due to economic turbulences, the growth forecast for FY2023 has been revised down by the IMF to below four percent. Inflation has increased sharply, to 35.7 percent in June 2023, due to devaluation and high food prices.
- 9. If timely implemented, the IMF program should help restore confidence, particularly given the positive track record under previous programs. Also, the sharp devaluation of the pound has meaningfully reduced external imbalances.
- 10. However, Egypt is not out of the woods yet. Authorities' commitment to fiscal consolidation and the flexible exchange rate still needs to be credibly (re-)established. The key risk to the medium-term outlook is of reforms getting derailed by affected vested interests, or by social discontent of the many groups left behind by the increasing costs of living. Macroeconomic risks are related to high refinancing needs amid inadequate reserves and FX shortages, potential delays in implementing the IMF program, difficulties in reducing the high inflation, the high level of debt and a potential for further shocks.
- 11. In the medium term, Egypt's economic outlook remains robust. Ultimately, growth should return to its potential, around six percent, according to the IMF, supported by exports and public investment. This will depend on the continued progress in structural reforms aimed at improving the environment for private-sector-led growth, as well as on maintaining macroeconomic stability.
- 12. According to the IMF, Egypt's public debt is sustainable but not with high probability.<sup>47</sup> Overall risks of sovereign stress is high due to both the high level of debt (around 93 percent of GDP in FY2023) and high financing needs (over 30 percent of GDP). Public debt is expected to gradually decline to 85.4 percent of GDP in FY2025, and to below 65 percent of GDP in FY33. This hinges on growth, the continued implementation of reforms and prudent fiscal policies, including a 2.5-percent-of-GDP primary surplus from FY2024. Debt risks are mitigated by a large share of domestic debt

<sup>&</sup>lt;sup>47</sup> The probability qualification is required by IMF policies in case of borrowers above certain thresholds. Otherwise, such qualification is not required, and debt would be assessed simply as "sustainable."

held by the liquid and captive domestic financial system and good relations with official creditors.

13. Egypt's sovereign credit ratings have been relatively stable for the past several years. However, with the recent macroeconomic turbulences and external liquidity stress, in April/May 2023, S&P changed the outlook from stable to negative on Egypt's 'B' rating, while Fitch and Moody's downgraded Egypt by a notch, to 'B' and 'B3,' respectively. In addition, Fitch assigned a negative outlook, while Moody's put Egypt on review for a potential further downgrade.

#### **Annex 4: Egypt Panda Guarantee Call Process**

The below sequence of events follows the New and Amended Product Paper Addendum on Privately Place Sovereign Bond (Addendum 3) three possible phases: (1) The Stand-by, (2) Call on Guarantee, and (3) Member reimbursement. This sequence of event is subject to change following the regulatory review.

#### **Sequence of Event at Repayment:**

- **Stand-By Phase:** Regular payments of interest and principal by the Egyptian Ministry of Finance (EMOF) to Bondholders:
  - EMOF pays interest / principal to their Non-Resident Account (NRA) at Bank of China (BOC) (acting as account bank and post-issuance manager), which will likely be the same account used for the issuance proceed (this should happen at least one PRC day before the coupon / principal due date
  - 2. BOC transfers money to Shanghai Clearinghouse (SHCH) based on EMOF's command. EMOF may also directly deposits into SHCH, if needed.
  - 3. SHCH distributes to investors accordingly.
- Call on Guarantee: If EMOF does not pay the interest and/or principal on time:
  - Triggering event reached as per the (to be determined) definition (which is expected to be a certain number of days prior to the end of the waiting period of the Bond's interest and principal schedule as per the Bond Documentation).
  - 2. SHCH notifies BOC as post issuance manager of the EMOF's failure to pay the interest and/or principal of the Bond.
  - 3. BOC delivers a written notice of demand for performance of the Guarantee to AIIB/AFDB (the Guarantors) after the payment request is rejected by the Issuer.
  - 4. AIIB/AFDB deposits the guaranteed payments to SHCH (this is expected to have to happen at least one day before the end of the waiting period of the Bond).
  - 5. SHCH delivers the guaranteed payments to investors accordingly.

#### • Member Reimbursement:

1. AIIB/AFDB will then claim the corresponding called amount to EMOF in accordance with their corresponding indemnity agreement.

The EMOF should then reimburse the guaranteed amount to AIIB/AFDB in accordance with the instructions of each guarantor (whether payment is required on demand or other repayment terms are provided).

#### Annex 5: Details on the Subprojects

**Fiber-to-the-Home Program.** The Fiber-to-the-Home **(**FTTH) subproject is the phase one of a nationwide program. This first phase will focus on Giza and Caro areas, aiming to connect up to 2.4 million Egyptian households to high-speed internet by using state-of-the-art fiber Gigabit Passive Optical Network (GPON) infrastructure. The GPON infrastructure will replace an existing Asymmetric Digital Subscriber Line (ADSL) or other DSL-based copper network infrastructure, to save energy, reduce carbon emission footprint and enable an improved digital economy thanks to higher internet speed.

FTTH Phase 1	
Total Subproject Cost	USD510 million
Financing by GOE	USD510 million
GOE Financing Supported by AIIB PDG <sup>1</sup>	USD112 million
Other Financing Sources	None
Economic Internal Rate of Return (EIRR)	7.4 percent
Objective	To connect about 2.4 million of end-customers from Giza and Cairo areas.
Subproject Description	<b>Technical scope:</b> The subproject will replace the existing ADSL or other DSL-based copper network infrastructure with state-of-art fiber GPON infrastructure. Many of the planned connection areas currently do not have any fixed internet access (only mobile).
	<b>Components:</b> The subproject's implementation will span one and half year beginning of 2024 to mid-2025. The districts of historical Cairo, pharaonic Giza, Nasr City and Madinaty will be part of this phase one.
01-1	FTTH Phase 1 expects to reach 2.4 million households.
Status	The equipment providers have been shortlisted and will be called to submit technical and financial proposals on a region-by-region basis.
Expected Implementation Period	Start date: Q1 2024 End date: Q2 2025

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<sup>&</sup>lt;sup>1</sup> Subcomponents amounts are indicative and subject to the allocation of the principal of the Bond which will happen on every budget year of the GOE after its issuance. The current amounts are based on the current total cost of the subprojects collected during the due diligence and on a non-weighted percentage of the total GOE part of the financing of the four subprojects. (Idem for the below amounts of the four subprojects).

Alexandria Tram El Raml Rehabilitation (Victoria Station – El Raml). The Alexandria Tram El Ram Rehabilitation subproject consist of the full retrofit of all existing infrastructure related to Alexandria Tram lines, located in the second-largest city in Egypt, Alexandria. The rehabilitation includes the replacement of rails and depot, civil works, signalization and rolling stock of this key public transport line.

Alexandria Tram El Raml Rehabilitation				
Total Subproject Cost	USD346 million			
Financing by GOE	USD188 million			
GOE Financing Supported by AIIB PDG	USD41 million			
Other Financing Sources	USD158 million			
EIRR	7.5 percent			
Subproject Description	<ul> <li>History: Alexandria tramway network was first built in 1863, and subsequently remodeled into its current state in 1976 with rolling stock from Japan. It serves the central and eastern parts of the city and while it is physically connected to the rest of the tram network, it is largely operated separately. In 2020, additional rolling stock was again purchased from a Ukrainian company.</li> <li>Components: The rehabilitation project is separated in three lots: <ul> <li>Lot 1: Civil works, system and track works, with an expected 24-month completion period.</li> <li>Lot 2: Rolling stock and specialist equipment – with an expected completion period of 33 months.</li> <li>Lot 3: Enabling works – with an expected completion period of three to six months.</li> </ul> </li> </ul>			
	Speed: With the new rolling stock on the rehabilitated line, the metro is expected to operate at an average speed of 22 km/h, with a maximum speed of 70 km/h, doubling the average speed of 11 km/h pre-rehabilitation.  Capacity: Current capacity per train is around 200-300 people, and it is expected that the capacity will increase to 620 post rehabilitation.			
	Station upgrade: A total of 24 stations will be upgraded as part of the project, covering a total length of 14.4 km. Out of the 24 stations, 11 will be at ground level, 12 will be elevated possibly on viaducts and one in an open trench. This will enable the line to be safer and faster as there will be no road crossings.			

	Integrated system: Once the rehabilitation is complete, the line will have three intermodal hubs with the new metro line and other tramway lines. A fare collection system is also included in the scope of the rolling stocks and should work along with the other system that are being rehabilitated currently in Alexandria (Metro).
Status	Subproject is expected to commence by the end of 2023.
Expected Implementation Period	Start date: Q4 2023 End date: Q1 2029

Cairo Metro Line 1. The subproject consists of rehabilitation of Metro Line 1 of the Cairo metro network, which was initially electrified in the 1980s. The rehabilitation includes the renewal of the signaling system, telecommunications equipment, centralized control system, power supply, track repairs and the electrical and mechanical systems. The subproject is co-financed by Europe Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), the French Development Agency (AFD) alongside the Egyptian government.

Cairo Metro Line 1	
Total Subproject Cost	USD483 million
Financing by GOE	USD93 million
GOE Financing Supported by AIIB PDG	USD21 million
Other Financing Sources	USD389 million
EIRR	8.4 percent
Subproject description	History: The current line and equipment date back to 1966 and was the first metro line built in Egypt. The rolling stock was first based on diesel propulsion and switched to electrical in 1986.  Rolling Stock:
	<ul> <li>The rehabilitation of the 33 electric multiple units (EMUs) and purchase of five trains from Alstom, has been finished through a separate project.</li> <li>Currently, Line 1 has 23 Mitsubishi trains from the 2000s, 32 trains from Alstom (dating from the 1986) and 32 Hyundai (from 2015). The National Authority of Tunnels</li> </ul>

	<ul> <li>(NAT) also plans to purchase additional 55 trains from Alstom financed through a French government loan.</li> <li>Each EMU consists of three carriages and each train consists of three EMUs coupled together for a total of nine carriages. The trains operate at an average speed of 60 km/h.</li> </ul>				
	<b>Signaling System:</b> The subproject will upgrade the signaling system to a communication-based train control system, centralized control (telecommunication and CCTV), mechanical, firefighting system, ventilation system and some tracks. This will achieve a headway of 2.5 minutes between trains (24 trains per hour per direction). This represents approximately twice of the current efficiency of five minutes between trains (12 trains per hour per direction).				
	<b>Ridership:</b> The ridership of the metro is expected to remain relatively stable pre-, during and post-rehabilitation.				
	Safety / Climate Risk Management:				
	<ul> <li>Flood management has been considered as part of the project design by bidders.</li> </ul>				
	<ul> <li>An upgrade of the firefighting system is also planned as part of this rehabilitation project, changing the system from dry to wet.</li> </ul>				
Status	<ul> <li>Completed the first stage of tendering which consists of technical analysis and is entering into the second phase of tendering through EBRD-developed client e-procurement portal.</li> <li>Expects to complete the project within 64 months of</li> </ul>				
Every set of the mineral of the set	signing the contract.				
Expected implementation period	Start date: Q4 2023 End date: Q1 2029				

**Cairo Metro Line 2.** The subproject involves the rehabilitation of Cairo Metro Line 2 extending a total of 21.7 km. The scope of work will include the renewal of the signaling system, power supply and parts of the tracks. The project is co-financed by EIB and EBRD alongside the Egyptian government.

Cairo Metro Line 2	
Total subproject Cost	USD356 million
Financing by GOE	USD39 million

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GOE Financing Supported by AIIB PDG	USD9.5 million			
Other Financing Sources	USD317 million			
EIRR	8.9 percent			
Subproject Description	<b>History:</b> The current line and equipment date back to 1995.			
	Rolling Stock:			
	<ul> <li>The rehabilitation of the 35 EMUs has been finished through a separate project. In total, Line 2 has currently 35 Mitsubishi trains, from 1995, four new Mitsubishi trains from the 2000s and six Hyundai trains. An order of eight new Hyundai trains is ongoing.</li> <li>The EMUs consist of two carriages each, coupled in sets of four, for a total of eight carriages per train. These operate with an average speed of 44 km/h.</li> </ul>			
	<b>Signaling System:</b> The subproject will upgrade the signaling system to a communication-based train control system, the centralized control and an upgrade of the power supply. This will achieve a headway of one train every two minutes (30 trains per hour per direction). This represents approximately twice of the current frequency of one train every four minutes (15 trains per hour per direction).			
	<b>Ridership:</b> The ridership of the metro will remain relatively stable pre-, during and post-rehabilitation.			
	Safety / Climate Risk Management: Flood management has been included in the technical specification.			
	<ul> <li>Maintenance work of the project will be performed by the contractor.</li> <li>The project is currently undergoing feasibility studies and will soon begin the tendering process.</li> <li>The technical specification is due to be achieved in July 2023, with a tender process planned to be finished in Q1 2024.</li> </ul>			
Status	Starting the first phase of tendering process, with feasibility study undergoing.			
	Start date: Q4 2024 End date: Q1 2030			

**Annex 6: Reporting and Monitoring** 

No.	Requested Report	Frequency	Due Date of
			Submission
1	Result Monitoring Framework (Annex 1)	Annual	One year after the issuance
Enviro	nmental and Social reports		
1	Annual allocation and progress of implementation and impact report	Annual	Reporting frequency aligned with the Bond reporting
2	Independent E&S monitoring report on actions included in the ESAP or implementation of ESMP for transport sector Subprojects. Progress report for FTTH Subproject with E&S aspects.	As per ESAPs	Following time schedule set up in the ESAPs and ESMP of transport Subprojects. For FTTH Subproject, annual progress report incorporating E&S.
Procu	rement reports		
2	Procurement Implementation Report covering four Subprojects.	Annual in addition to timely report of any procureme nt-related prohibited practice	No later than six months after financial year end.
Financ	cial Management reports		
1	External review report (e.g., SPO) assessing the allocation of net proceeds to eligible expenditures, the progress of implementation, and the expenditures statement for Subprojects.	Annual	No later than six months after financial year end.
2	The audit report/statement of utilization of government funds in local Egyptian account for the Subprojects conducted by Accountability State Authority (or supreme audit authority)	Annual	No later than six months after financial year end
3	The EMOF to reach agreement on Subprojects implementation agencies' sharing of the Subproject annual report, in accordance with legal requirement for submission to	Annual	No later than six months after financial year end

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and approval by the other MDB co-	
financiers (i.e., EIB, EBRD, AFB)	