

FRAMEWORK FINANCING AGREEMENT
(IND: Delhi–Meerut Regional Rapid Transit System Investment Project)

Parties This Framework Financing Agreement (FFA) dated 23 June 2020 is between India acting by its President (India) and the Asian Development Bank (ADB).

MFF Investment Plan India is committed to and will implement the Delhi–Meerut Regional Rapid Transit System (RRTS) Investment Project ("Investment Project"), which is described in Schedule 1 hereto.

The total cost of the Delhi–Meerut RRTS Investment Project over the period 2020 to 2027 is expected to be about \$3.45 billion equivalent.

Multitranche Financing Facility The Multitranche Financing Facility for the Delhi–Meerut Regional Rapid Transit System Investment Project ("Facility"), along with related co-Financing and grant assistance, is intended to finance four individual projects under the Investment Project applying time-slice modality, provided that such projects comply with the criteria set out in Schedule 4 hereto and that understandings set out in this FFA are complied with.

These may include:

- (i) **Output 1: Delhi–Meerut RRTS corridor commissioned.** This will develop the Delhi–Meerut RRTS corridor. It will include civil works, railway track, station buildings, multimodal hubs, maintenance depots, and traction and power supply.
- (ii) **Output 2: Institutional capacity of the National Capital Region Transport Corporation strengthened.** This will include the following (a) develop an institutional strategy including an organizational, financial, and technology road map; (b) develop training programs in project and contract management, financial management, procurement and safeguards; (c) adopt a gender-friendly workplace policy; (d) support the NCRTC for developing a transit-oriented development action plan and value capture financing instruments for enhancing financial sustainability; and (e) strengthen capacity of NCRTC to undertake PPP initiatives.
- (iii) **Output 3: Mobility and economic opportunities of women and differently abled improved.** This will include trainings and provision of (a) safe mobility for EWCD; (b) increased awareness on safe mobility, self-defense and improved employability skills for selected female students along RRTS corridor; and (c) provision of gender-, socially-inclusive and environmentally sustainable public toilets around RRTS stations.

This FFA does not constitute a legal obligation on the part of ADB to commit any financing. At its sole discretion, exercised reasonably,

ADB has the right to deny any financing request made by India, cancel the uncommitted portion of the Facility, and withdraw India's right to request any financing tranche under the Facility. Financing tranches may be made available by ADB provided matters continue to be in accordance with the general understandings and expectations on which the Facility is based as laid out in this FFA.

This FFA does not constitute a legal obligation on the part of India to request any financing. India has the right not to request any financing under the Facility. India also has the right at any time to cancel any uncommitted portion of the Facility.

India and ADB may exercise their respective rights to cancel the Facility or any uncommitted portion thereof, and ADB may exercise its right to refuse a financing request, by giving written notice to such effect to the other party. The written notice will provide an explanation for the cancellation or refusal and, in the case of a cancellation, specify the date on which the cancellation takes effect. ADB may cancel the facility or reject a financing request when there is a material noncompliance with ADB policies or FFA undertakings; or there are undue delays in the submission of the financing requests or the implementation of the Investment Project. ADB shall consult with India prior to issuing any notice to cancel, including opportunity to address any potential material noncompliance that may be identified during Investment Project implementation.

Financing Plan

The financing plan for the Delhi–Meerut RRTS Investment Project is summarized below.

| Financing Source | Total (\$million) | Share (%) of Total |
|--------------------------------------|------------------------------|-------------------------------|
| Asian Development Bank | 1,049.0 | 30.4 |
| Asian Infrastructure Investment Bank | 500.0 | 14.5 |
| Japan Fund for Poverty Reduction | 3.0 | 0.1 |
| Government | 1,897.7 | 55.0 |
| Total (Project) | 3,449.7 | 100.0 |

Financing Terms

ADB will provide loans and administer cofinancing and grant assistance to help finance projects under the Investment Project, as and when the latter are ready for financing, provided, India is in compliance with the understandings hereunder, the projects are in line with those same understandings, and a related request is made under a periodic financing request. Each loan will constitute a tranche or Project as the context desires.

Each tranche under the Facility may be financed under terms different from the financing terms of previous or subsequent tranches. The choice of financing terms will depend on the relevant

Project, capital market conditions, and ADB's financing policies, all prevailing on the date of signing the legal agreement for such tranche.

Tranches may be provided in sequence or simultaneously, and some may overlap in time with each other.

Commitment charges are not payable on the Facility. They are payable only on financing actually committed by ADB as a loan. ADB rules on commitment charges, which are in effect when the legal agreements are signed for a Project, will apply with respect to such Project.

Amount

The maximum financing amount available under the Facility is one billion forty-nine million dollars (\$1,049,000,000). It will be provided in individual tranches as loans from ADB's Ordinary Capital Resources.

Availability Period

The last date on which any disbursement under any project under the Facility may be made on or before 30 August 2027. The last financing tranche is expected to be executed by 31 March 2026.

Terms and Conditions

India will cause the loan proceeds of each tranche under the Investment Project to be applied to the financing of expenditures of the related Project, in accordance with conditions set forth in this FFA and the legal agreements for each tranche.

Execution

The Executing Agency for the Investment Project will be India's Ministry of Housing and Urban Affairs (MoHUA) acting through the National Capital Region Transport Corporation (NCRTC). The Executing Agency will implement the Investment Project, in accordance with the principles set forth in Schedule 1 to this FFA, and as supplemented in the legal agreements for each tranche.

Periodic Financing Requests

India may request, and ADB may agree, to provide loans under the Facility to finance the Investment Project and its related projects upon the submission of a Periodic Financing Request (PFR). Each PFR should be submitted by India. India will make available to the Executing Agency, the proceeds of the loan under each tranche in accordance with the related PFR, and the legal agreements for the tranche.

Each individual tranche will be for an amount of no less than one hundred million dollars (\$100,000,000), or its equivalent. ADB will

review the relevant PFRs and, if found satisfactory, prepare the related legal agreements.

The projects for which financing is requested under a PFR will be subject to the selection criteria set out in Schedule 4 hereto, satisfactory due diligence, and preparation of relevant safeguard and fiduciary frameworks, plans and other documents.

Until notice is otherwise given by India, the Secretary, Additional Secretary, Joint Secretary, Director, or Deputy Secretary in the Department of Economic Affairs of the Ministry of Finance of the Government of India are designated as authorized representatives of India for the purpose of executing the PFRs.

General Implementation Framework

The Facility will be implemented in accordance with the general framework set out in Schedule 3 hereto and the Facility Administration Manual (FAM) agreed between India and ADB.

Procedures

Tranches to be provided under the Facility will be subject to following procedures and undertakings:

- (i) India will have notified ADB of a forthcoming PFR in advance of the submission of the PFR.
- (ii) India will have submitted a PFR in the format agreed with ADB.
- (iii) ADB may, in its sole discretion, decline to authorize the negotiation and execution of any legal agreement for a tranche.
- (iv) If ADB confirms acceptance of the PFR, the legal agreements will be negotiated and executed by the parties.

PFR information

The PFR will substantially be in the form agreed with ADB, and will contain the following details:

- (i) loan amount;
- (ii) description of projects to be financed;
- (iii) cost estimates and financing plan;
- (iv) implementation arrangements specific to the projects;
- (v) confirmation of the continuing validity of and adherence to the understanding in this FFA;
- (vi) confirmation of compliance with the provisions under previous Loan Agreement(s) and Project Agreement(s), as appropriate; and
- (vii) other information as may be required under the FAM, or reasonably requested by ADB.

Safeguards

Attached as Schedule 5 are references to the Safeguard Frameworks and plans that will be complied with during the implementation of the Facility and the individual tranches therein.

ADB's Safeguard Policies in effect as of the date of signing of legal agreements for a tranche will be applied with respect to the projects financed under such tranche.

Procurement

All goods, works, and consulting and non-consulting services to be financed under the Facility will be procured in accordance with ADB's *Procurement Policy* (2017, as amended from time to time) and the *Procurement Regulations for ADB Borrowers* (2017, as amended from time to time).

**Advance contracting;
Retroactive financing**

Under each tranche, ADB may, subject to its policies and procedures, allow on request (i) advance contracting of Goods, Works, and Services and (ii) retroactive financing of eligible expenditures for Goods, Works, and Services up to 20% of proposed individual loan, incurred prior to loan effectiveness but not earlier than 12 months before the date of signing of the related legal agreements. India acknowledges that any approval of advance contracting and/or retroactive financing will not constitute a commitment by ADB to finance the related tranche.

Disbursements

Disbursements will be made in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

**Monitoring,
Evaluation, and
Reporting
Arrangements**

Schedule 2 hereto sets out the Design and Monitoring Framework for the Investment Project, against which the implementation effectiveness will be evaluated.

Further monitoring, evaluation and reporting arrangements to be complied with are provided in the Implementation Framework in Schedule 3.

Undertakings

Attached as Schedule 6 are the undertakings provided by India.

INDIA



Shakil Alam
Director (Fund Bank/ADB)
Department of Economic Affairs

ASIAN DEVELOPMENT BANK



Kenichi Yokoyama
(Country Director)

SCHEDULE 1

MFF CONSTITUENTS

A. Road Map

1. The existing transport system within the National Capital Region (NCR), consisting of a variety of modes such as private and public road transport, suburban rail system, and metro rail, is inadequate to meet passenger transport needs. There is urgent need to enhance the regional transport system and incentivize and encourage people to stop migrating to Delhi by offering them the alternative of settling in surrounding cities and being able to commute to Delhi through a fast public transport system. Various mobility options have been proposed for the sustainable development of urban transport to curb pollution, congestion and vehicular growth. The Functional Plan on Transport, approved by the NCR Planning Board in November 2009, recommended an integrated multimodal transportation system to improve the mobility of both people and goods in NCR.¹ The plan specifically includes a proposal for the construction of eight rail corridors to connect Delhi to other cities in the NCR with high-speed commuter trains under the regional rapid transit system (RRTS). Implementation of the RRTS gained impetus with the establishment of the National Capital Region Transport Corporation (NCRTC) that is mandated to coordinate its implementation across the four different states of NCR (Delhi, Haryana, Rajasthan and Uttar Pradesh).

2. The NCRTC plans to implement three prioritized RRTS corridors, the first one being the Delhi–Meerut corridor. The second corridor (180 km), proposed to be implemented in three stages, will be the Delhi–Gurugram–Shahjahanpur–Neemrana–Behror–Alwar corridor, passing through the urbanized and industrialized areas of Haryana and connecting to Delhi airport. The third corridor (103 km) will connect Delhi to Panipat. All three corridors will converge at the RRTS station to be constructed at Sarai Kale Khan in Delhi, where passengers would be able to move from one corridor to another without the need for changing trains. The three prioritized corridors will be integrated with as many as eight Delhi Metro stations, three inter-state bus terminals as well as two Indian Railways stations in the national capital apart from several other towns in the NCR. The multi-modal integration will be provided through elevators, walkways, escalators as well as underpasses, depending on the location, to ensure that commuters get seamless transit options.

B. Strategic Context

3. Strengthening of urban mass transit systems and increasing environmental sustainability of cities through the development of railways, is well recognized in India's transport and regional plans and in the country partnership strategy of ADB for India.² The Investment Project is aligned with all pillars of the country partnership strategy on boosting economic competitiveness by expanding infrastructure networks for transport, enhancing management of corridor development and urban centers, providing inclusive access to these infrastructure networks, and addressing climate change. ADB will support long-term urban development planning and basic urban infrastructure investments, including for multimodal public transport facilities. Developing sustainable transport systems in Indian cities is a growing challenge and ADB's long term

¹ Government of India, Ministry of Housing and Urban Affairs, National Capital Region Planning Board. 2013. *Functional Plan on Transport for National Capital Region—2032*. New Delhi.

² ADB. 2017. *Country Partnership Strategy: India, 2018–2022—Accelerating Inclusive Economic Transformation*. Manila.

involvement through an MFF can provide the support to develop infrastructure and institutions that can deliver these new types of urban transport projects.

4. **Alignment with Strategy 2030.** The project is aligned with ADB's Strategy 2030 and explicitly focuses on key operational priorities as summarized in Table 1.

Table 1: Alignment with Strategy 2030

| Key Operational Priorities | Project Contributions |
|---|--|
| Addressing remaining poverty and reducing inequalities | Improving standards of living. The project will provide universal access to safe, reliable urban transport services promoting social inclusion and development particularly for vulnerable groups, by facilitating mobility and improving accessibility to centers of job opportunities. |
| Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability | Reducing greenhouse gas (GHG) emissions. The project will support climate change mitigation by encouraging commuters to shift from road-based public urban transport to the RRTS as a sustainable transport mode with lower GHG emissions. Ensuring climate and disaster resilience. The facility supports the implementation of climate- and disaster-resilient infrastructure, with designs addressing flooding risks during high rainfall. |
| Making cities more livable | Strengthening services in urban areas. By promoting urban mobility, supporting sustainable and integrated public transport, and equipping all stations with enhanced design features, all passengers—including women, the elderly, and differently-abled—can switch easily and safely between modes of transport. |
| Strengthening governance and institutional capacity | Enhancing service delivery. The operation and maintenance are expected to be undertaken by a private sector operator, which will promote more effective and timely service delivery and encourage greater accountability for the services provided. Improving management functions and financial stability. The project will provide capacity development support to uphold environmental and social safeguards, adhere to procurement and financial management standards, and implement anticorruption measures. |
| Accelerating progress in gender equality | Promoting women's social and economic empowerment. The project will support initiatives to raise awareness amongst women on safe mobility and provide entrepreneurial and employment opportunities. The explicit emphasis of the project on promoting physical and economic mobility of vulnerable women and differently-abled groups along the RRTS corridor will help address discriminations faced by these excluded groups. |

Source: Asian Development Bank.

5. **ADB's experience in India's railways and urban transport projects.** ADB's initial involvement in the urban transport subsector in India was to assist in policy and strategy aspects in line with the National Urban Transport Policy. ADB has also supported in the development of the Guidelines and Toolkits for Urban Transport Development in Medium-Sized Cities in India.³ ADB has been involved in the Jaipur Metro Rail Project, where it financed the extension of the first metro train line in Jaipur and drew up plans to build a second line for the north–south corridor.⁴ ADB is also financing the Mumbai Metro Rail Project to expand the metro network in the country's largest city.⁵

C. Policy Framework

6. As population and level of urbanization continue to grow rapidly in the NCR, especially in Delhi, government policies have primarily focused on population decentralization and regional integration by public transport. The development of rail-based mass transit systems is governed by three main policies. The National Urban Transport Policy (2006) of the Government of India

³ ADB. 2006. *India: Urban Transport Strategy*. Manila.

⁴ ADB. 2013. *Jaipur Metro Rail Line 1-Phase B Project, Report and Recommendations of the President*. Manila.

⁵ ADB. 2019. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to India for the Mumbai Metro Rail Systems Project*. Manila.

encourages the development of high-capacity public transport systems through special-purpose vehicles and offers financial support either in the form of equity or one-time viability gap financing.⁶ In this project, a special-purpose vehicle has been created and the national government has a 50% equity stake in it.

7. The National Transit Oriented Development Policy (2017) supports the capitalization of large-scale investments being made into public transit infrastructure by creating opportunities for land value capture, and facilitating dense, mixed-use developments around strategically located transit nodes, preferably within 5–10 minute walking distance. Transit Oriented Development (TOD) focuses on creating development patterns which facilitate use of public transit as a primary mode of transport.⁷ The proposed RRTS corridor shall expand and integrate new areas and trigger spatial and economic development. This will help to achieve sustainable development in NCR through integration of land-use and transportation. There will be enhanced real estate development activity as newer areas come under development and real estate valuations and transactions increase. The project preparation work has identified “influence zones” of all the RRTS stations together with four “special development areas”.⁸ These are proposed to be earmarked as transit-oriented development zones in accordance with the TOD Policy, which envisages land use densification to be done along the influence area of the corridor and at all selected transit stations.

8. The Metro Rail Policy (2017) emphasizes the benefits of mass rapid transit systems particularly in urban areas, and the state governments’ commitment to provide required support to metro rail companies and agencies to ensure financial sustainability during operations. The policy also mandates state governments to implement value capture financing for additional revenue generation for capital-intensive projects such as regional transit systems.⁹ While the concept is still at a nascent stage in India, most of the mass transit projects in different Indian states have successfully utilized at least one or two land value capture instruments to monetize the benefits.¹⁰ The RRTS corridor development offers significant potential for increase in land value. The land value capture instruments that can acquire non-farebox revenue and other additional revenue streams from this RRTS project have been identified and the Uttar Pradesh state government is being assisted in their implementation.

D. The Investment Project

9. **Regional rapid transit system.** Rail-based mass transit systems are an efficient transport solution to serve the increasing travel demand between Delhi and other cities in the NCR. The proposed rail line will reduce travel time between Meerut and central Delhi by public transport from over 3–4 hours to about 1 hour. The RRTS will provide urgently needed transport capacity between Delhi and other rapidly growing cities in the NCR, reduce dependence on road-based transportation, reduce pollution and greenhouse gas emissions, reduce immigrant population density, and thereby improve livability of the entire region.

⁶ Government of India, Ministry of Housing and Urban Affairs. 2006. *National Urban Transport Policy*. New Delhi.

⁷ Government of India, Ministry of Housing and Urban Affairs. 2017. *National Transit Oriented Development Policy*. New Delhi.

⁸ The four “special development areas” are proposed at Modipuram (346 hectares), Meerut South (400 hectares), Duhai (400 hectares) and Guldhar (250 hectares). The “influence zone” forms a radius of 1.5 km around each of the proposed RRTS stations.

⁹ Government of India, Ministry of Housing and Urban Affairs. 2017. *Metro Rail Policy*. New Delhi.

¹⁰ The most commonly applied value capture instruments are additional stamp duty charges and increased floor area ratio.

10. ADB financing will be used to develop the Delhi–Meerut RRTS corridor, including railway track, station buildings, multimodal hubs, maintenance depots, traction and power supply.¹¹ About 20 km of the RRTS line from Partapur to Modipuram will be used to run the proposed Meerut Metro, originally planned as a parallel line to the RRTS. This section will have six dedicated stations exclusively for Meerut Metro operations.

11. The Investment Project is estimated to cost \$3,449.7 million, including taxes and duties, physical and price contingencies, interest, and other charges during implementation.

Table 2: Summary Cost Estimates
(\$ million)

| Item | Amount ^a |
|--|---------------------|
| A. Base Cost^{b, c} | |
| 1. Output 1: Delhi–Meerut regional rapid transit system corridor commissioned | 2,526.5 |
| 2. Output 2: Institutional capacity of the NCRTC strengthened | 14.8 |
| 3. Output 3: Mobility and economic opportunities of women and differently-abled improved | 2.7 |
| Subtotal (A) | 2,544.0 |
| B. Contingencies^d | 760.5 |
| C. Financial Charges During Implementation^e | 145.2 |
| Total (A+B+C) | 3,449.7 |

Note: Numbers may not sum precisely due to rounding.

^a Includes taxes and duties of \$197.6 million. With the exception of Output 3, the government will finance taxes and duties through cash contribution.

^b In mid-2019 prices as of 2 January 2020.

^c Excluding the contributions towards the state taxes and the government owned land.

^d Physical contingencies computed at 17% for civil works and goods. Price contingencies computed at average of 4.0% on local currency and 1.6% for foreign currency costs.

^e Includes interest and commitment charges. Interest during construction for the ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.2%. Commitment charges for the ADB ordinary capital resources loan is 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank, Asian Infrastructure Investment Bank.

E. Financing Plan

12. The government has requested an MFF in an amount of up to \$1,049 million from ADB's ordinary capital resources to help finance a part of the Investment Project. The MFF is expected to comprise four tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the FFA. The first tranche of the MFF will comprise a regular loan of \$500 million, have a 25-year term, including a grace period of 8 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year and such other terms and conditions set forth in the draft loan and project agreements. Based on the annuity type repayment method with 10% discount rate, the average maturity is 19 years, and the maturity premium payable to ADB is 0.20% per year.

13. The government has also requested (i) a loan not exceeding \$500 million from the Asian Infrastructure Investment Bank (AIIB) to help finance the Investment Project; and (ii) a grant not exceeding \$3 million from the Japan Fund for Poverty Reduction (JFPR). The summary financing plan is in Table 3. ADB will finance the expenditures for civil works, traction, and consulting services. The AIIB will provide joint cofinancing for project 1 and the loan will be partially

¹¹ ADB financing will not include rolling stock, and signaling and telecommunication system.

administered by ADB. The New Development Bank (NDB) will also provide \$500 million in parallel financing for specific packages. These will be under separate contracts and will not be administered by ADB. The JFPR grant, fully administered by ADB, will finance a range of pilot activities including toilet blocks outside station areas, assistive aids for the differently-abled, training for women and differently-abled on safe mobility and employment opportunities, sensitization and behavioral change trainings of public transport providers. Counterpart funding will be provided by the government to finance taxes and duties, and other in-kind contributions. Universal procurement applies to the components cofinanced by ADB and AIIB.

Table 3: Summary Financing Plan
(\$ million)

| Source | Tranche (estimated year of PFR submission) | | | | Amount | Share of Total (%) |
|--|---|----------------|--------------|--------------|----------------|-----------------------|
| | 1 (2020) | 2 (2021) | 3 (2023) | 4 (2025) | | |
| Asian Development Bank | | | | | | |
| OCR (regular loan) | 500.0 | 0.0 | 250.0 | 299.0 | 1,049.0 | 30.4 |
| Asian Infrastructure Investment Bank (loan) ^a | 0.0 | 500.0 | 0.0 | 0.0 | 500.0 | 14.5 |
| Japan Fund for Poverty Reduction (grant) ^b | 3.0 | 0.0 | 0.0 | 0.0 | 3.0 | 0.1 |
| Government ^c | 799.6 | 799.6 | 206.0 | 92.5 | 1,897.7 | 55.0 |
| Total | 1,302.6 | 1,299.6 | 456.0 | 391.5 | 3,449.7 | 100.0 |

OCR = ordinary capital resources, PFR = periodic financing request.

Note: Numbers may not sum precisely due to rounding.

^a Partially administered by ADB.

^b Fully administered by ADB.

^c The government will provide contributions to cover (i) part of civil works, (ii) part of signaling and telecommunications system and track works, (iii) procurement of rolling stock, (iv) taxes and duties, (v) land acquisition and resettlement, and (vi) part of contingencies.

Source: Asian Development Bank and Asian Infrastructure Investment Bank.

14. Climate mitigation is estimated to cost \$3,439.7 million and climate adaptation is estimated to cost \$10.05 million under the investment project. ADB will finance 30.4% of mitigation and adaptation costs while AIIB will finance 14.5%. Details are in the FAM.

SCHEDULE 2

DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROJECT

| Impact the Project is Aligned with Urban mobility in the National Capital Region improved (National Urban Transport Policy, 2006) ^a | | | |
|--|---|--|---|
| Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting Mechanisms | Risks |
| Outcome Efficiency, safety, social inclusiveness, and environmental sustainability of transport in the Delhi–Meerut RRTS corridor improved | By 2028: a. Travel time between Delhi and Meerut by train reduced to 1 hour (2020 baseline: 3–4 hours) (OP 2.4.1) b. 258,035 tons of CO ₂ reduced per annum (2020 baseline: 0) (OP 3.1, OP 3.1.3) c. At least 70% of riders, including EWCD, perceive the RRTS to be accessible, safe, and reliable ^b (2020 baseline: Not applicable) (OP 2.1.4) | a.–b. NCRTC statistics c. RRTS user survey by NCRTC | Feeder connectivity issues impact ridership. |
| Outputs 1. Delhi–Meerut RRTS corridor commissioned | By 2027: 1a. 82 route–km of standard gauge electrified rail track installed, with systems and signaling (2020 baseline: 0) (OP 1.3.1, OP 3.2.5, OP 4.1.2) 1b. 24 EWCD-friendly stations with climate- and disaster-resilient features constructed and operational (2020 baseline: 0) (OP 1.3.1, OP 3.2.5, OP 4.1.2) 1c. At least five RRTS stations developed as major multimodal hubs ^c (2020 baseline: 0) (OP 1.3.1, OP 3.2.5, OP 4.1.2) 1d. At least one carriage in every RRTS train reserved for women only (2020 baseline: Not applicable) (OP 2.2.3) 1e. CCTV cameras installed in all stations, to monitor coaches, pick-up, drop-off, and in all public areas (2020 baseline: Not applicable) (OP 2.2.3, OP 2.4.1, OP 4.1.2) | 1a.–e. Progress reports | Unpredicted ground conditions, such as mixed strata, may delay tunnel boring works in the underground sections. |
| 2. Institutional capacity of the NCRTC strengthened ^d | By 2026: 2a. Recommendations and action plan on TOD, VCF instruments, and PPP initiatives finalized and approved by NCRTC (2020 baseline: Not applicable) 2b. A smart-technology-based platform (BIM) established and adopted for project design, implementation, and management (2020 baseline: 0) 2c. Gender-friendly work place policy developed and institutionalized within the NCRTC | 2a.–c. Progress reports | |

| Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting Mechanisms | Risks |
|---|--|--|---|
| | (2020 baseline: Not applicable) (OP 2.3.2) 2d. At least 50 NCRTC staff reported increased knowledge in project and contract management, financial management, procurement, and safeguards (2020 baseline: Not applicable) (OP 6.1.1) | 2d. Post-training program reports and surveys of NCRTC staff | |
| 3. Mobility and economic opportunities of women and differently abled improved ^e | By 2025: 3a. At least 1,400 women received training for employment and/or entrepreneurial opportunities arising from improved RRTS corridors (2020 baseline: 0) (OP 2.1.1) 3b. At least 1,000 differently abled people received hearing, visual, and/or physical mobility assistive aids (2020 baseline: 0) (OP 1.3) | 3a.–3b. Progress and completion reports submitted to ADB and NCRTC by the contracted organization, including certificates issued on completion of trainings and/or receipt of assistive aids | Mobilization of target beneficiaries takes longer because of social behavior and perceptions. |

Key Activities with Milestones

1. Delhi–Meerut RRTS corridor commissioned

- 1.1 Award and mobilize general consultants and detailed design consultants by Q2 2019.
- 1.2 Commence advance contracting by Q3 2019.
- 1.3 Award contracts by Q4 2020.

2. Institutional capacity of the NCRTC strengthened

- 2.1 Complete initial capacity-building plan and structuring by Q4 2020.
- 2.2 Award BIM platform support consultants by Q4 2020.
- 2.3 Award and mobilize consultants for TOD and VCF by Q4 2020.
- 2.4 Establish BIM platform for the project design, implementation, and management by Q2 2021.
- 2.5 Develop gender-friendly workplace policy by Q2 2021.
- 2.6 Establish institutional capacity for project implementation and management using smart technologies by Q3 2021.
- 2.7 Award training and capacity-building contracts by Q2 2022.

3. Mobility and economic opportunities of women and the differently abled improved

- 3.1 Establish GESI implementation unit by Q4 2020.
- 3.2 Award and mobilize national (nongovernment or consulting) organizations by Q1 2021.

Inputs

ADB: \$1,049,000,000 (loan)
 Government: \$1,897,700,000
 AIIB: \$500,000,000 (loan)
 JFPR: \$3,000,000 (grant)

Assumptions for Partner Financing

Outputs not administered by ADB that are necessary to reach the outcome include:
 Part of rolling stock, S&T systems, construction of multistoried staff quarters, and connectivity from Mathura road to Jangpura stabling yard complex (NDB: \$500,000,000)

ADB = Asian Development Bank, AIIB = Asian Infrastructure Investment Bank, BIM = building information modelling, CCTV = closed-circuit television, CO₂ = carbon dioxide, EWCD = elderly, women, children, differently abled, GESI = gender equality and social inclusion, JFPR = Japan Fund for Poverty Reduction, km = kilometer, NCRTC = National Capital Region Transport Corporation, NDB = New Development Bank, PPP = public–private partnership, Q = quarter, RFI = results framework indicator, RRTS = regional rapid transit system, S&T = signaling train control and telecommunication, TOD = transit-oriented development, VCF = value capture financing.

^a Government of India, Ministry of Housing and Urban Affairs. 2006. *National Urban Transport Policy*. New Delhi.

- ^b The indicator follows the approach of another (and only) recently approved project from India, the Mumbai Metro Rail Systems Project, where the target is 60%. The target is based on extensive discussions with the NCRTC and reflects ADB's experience in the design of the Mumbai Metro Rail Systems Project.
- ^c Major multimodal hubs are RRTS stations that will include easy interchange to rail, metro, and bus stations for passengers.
- ^d Output 2 to be supported by technical assistance funded by the Urban Climate Change Resilience Trust Fund. ADB. 2019. [*Technical Assistance to India for Strengthening Climate Change Resilience in Urban India Subproject 3: Strengthening Smart Urban Mass Rapid Transit and Climate Change Resilience in the National Capital Region*](#). Manila.
- ^e Output 3 to be supported by attached grant funded by the Japan Fund for Poverty Reduction.

Contribution to the ADB Results Framework:

- OP 1.3 Poor and vulnerable people with improved standards of living. Expected: 700,000 passengers daily.
- OP 1.3.1 Infrastructure assets established or improved. Expected: four assets (RRTS corridor, stations, smart-technology-based platform).
- OP 2.1.1 Women enrolled in technical and vocational education and training and other job training. Expected: 1,400 women.
- OP 2.1.4 Women and girls benefiting from new or improved infrastructure. Expected: 150,000 (20% of estimated ridership of 750,000).
- OP 2.2.3 Solutions to prevent or address gender-based violence implemented. Expected: two solutions.
- OP 2.3.2 Measures on gender equality supported in implementation. Expected: two measures.
- OP 2.4.1 Time-saving or gender-responsive infrastructure assets and/or services established or improved. Expected: four assets (RRTS corridor, stations, smart-technology-based platform).
- OP 3.1 Total annual greenhouse gas emissions reduction. Expected: 250,000 tons of carbon dioxide per year.
- OP 3.1.3 Low-carbon infrastructure assets established or improved. Expected: three assets (RRTS corridor, stations, smart-technology-based platform).
- OP 3.2.5 New and existing infrastructure assets made climate and disaster resilient. Expected: two assets (RRTS corridor, stations).
- OP 4.1.2 Urban infrastructure assets established or improved. Expected: four assets (RRTS corridor, stations, smart-technology-based platform).
- OP 6.1.1 Government officials with increased capacity to design, implement, monitor, and evaluate relevant measures Expected: at least 50 NCRTC staff.

Source: Asian Development Bank.

SCHEDULE 3

IMPLEMENTATION FRAMEWORK

1. In addition to the standard assurances, India, the Ministry of Housing and Urban Affairs (MoHUA), and the National Capital Region Transport Corporation (NCRTC) have given the following assurances on implementation of the Investment Project, which will be incorporated in the individual legal agreements as applicable for tranches, subject to any amendments to be mutually agreed among the parties to the related project and legal agreements.

A. Implementation Arrangements

2. The Executing Agency will be India's MoHUA acting through the NCRTC. The proposed institutional arrangements for implementation of the Investment Project will be in accordance with Table 5 included in the FAM.

3. The Executing Agency will ensure that sufficient staff with adequate, relevant expertise are available throughout the duration of the Investment Project and will be equipped with necessary office space, facilities, equipment, support staff and management information systems. To the extent reasonably feasible, the same staff will continue to be assigned to key positions in the project implementation unit at the central level and in the already established project management offices at the site level throughout the duration of the Investment Project.

4. A general consultant has been engaged by NCRTC using counterpart funds to support the Executing Agency in undertaking overall Investment Project management. The general consultant will ensure timely arrangement and delivery of the Investment Project and the individual projects by providing advice to the Executing Agency; and facilitating inter-agency and/or stakeholder coordination as well as reporting to ADB. The general consultant and/or engineer/s will also be the construction supervision consultant, who will act as the engineer for the construction contracts under the Investment Project.

B. Fund Flow

5. Flow of funds under the Facility for individual tranches will be in accordance with the structure as cited in Figure 3 of the FAM. India will ensure adequate and timely availability of ADB loan, co-Financed loans and grants under the Investment Project to NCRTC along with counterpart funds, all towards timely completion of the projects under the Investment Project.

C. Accounting, Auditing and Reporting

6. India will ensure or cause the Executing Agency to ensure that NCRTC will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred in the Investment Project and its individual projects as agreed with ADB and detailed in the FAM.

7. India will ensure that NCRTC will finalize an accounting procedure manual for the day-to-day activities of the Investment Project. The Executing Agency will prepare individual project level financial statements in accordance with India's accounting laws and regulations which are consistent with international accounting principles and practices and as acceptable to ADB.

8. The Executing Agency will cause the detailed project level financial statements to be audited in accordance with India's audit regulations by an independent auditor appointed by the Comptroller & Auditor General of India (C&AG) and acceptable to ADB. The audited project financial statements together with the auditor's opinion will be presented in the English language to ADB within 6 months from the end of the fiscal year by the Executing Agency.

9. The audited entity level financial statements, together with the auditor's report and management letter, if any, will be submitted in the English language to ADB within 1 month after their approval by the relevant authority.

10. The audit report for the individual project financial statements will include a management letter, if any, and auditor's opinions, which cover (i) whether the financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the loan and co-Financed loan, were used only for the purpose(s) of the Investment Project and projects therein; and (iii) whether the borrower or Executing Agency was in compliance with the financial covenants (where applicable) contained in the related legal agreements. Similar requirements if any from the Co-Financiers shall also be adhered to by the NCRTC on a timely basis.

11. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal Investment Project supervision, and followed up regularly with all concerned, including the external auditor.

12. India and the Executing Agency have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.¹² ADB reserves the right to require an addition in the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the individual project's financial accounts to confirm that ADB's financing is used in accordance with ADB's policies and procedures.

13. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy.¹³ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, if any, additional auditor's opinions, and audited entity financial statements will not be disclosed.¹⁴

¹² ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

¹³ Access to Information Policy: <https://www.adb.org/documents/access-information-policy>.

¹⁴ This type of information would generally fall under exceptions to disclosure. ADB. 2018. *Access to Information Policy*. Paragraph 16 and/or 17.

D. Project Performance Monitoring and Evaluation

14. **Project performance monitoring.** The achievement of the individual project performance targets will be assessed following the DMF. The Executing Agency will establish an Investment Project performance monitoring system, in form and substance that is acceptable to ADB for use throughout the life of the Investment Project.

15. **Compliance monitoring and review.** Under each project, compliance with covenants under this FFA and legal agreements for each project will be monitored through ADB's project administration missions, including the project inception missions, to discuss and confirm the timetable for compliance with the loan covenants; project review missions to review the borrower's compliance with particular loan covenants; and, where there is any noncompliance or delay, to discuss proposed remedial measures with the borrower and the Executing Agency; and the midterm review, if necessary, to review covenants to assess whether they are still relevant or need to be changed or waived due to changing circumstances.

E. Safeguards

16. India will ensure that safeguards-related compliance and monitoring are undertaken and implemented in accordance with the safeguards frameworks and plans included under Schedule 5 to this FFA and the undertakings as included in Schedule 6 to this FFA.

17. **Gender.** The Gender Focal Point, as appointed by NCRTC, will facilitate the implementation of the Gender Equality and Social Inclusion (GESI) Action Plan. The Gender Focal Point will be responsible for conducting GESI trainings for field office, operations and maintenance personnel, and technical capacity development on GESI-related aspects of planning, design, operations and maintenance of the RRTS. Progress in the achievement of the indicators set out in the GESI Action Plan will be reflected in the Quarterly Progress Reports to be submitted to ADB by the Executing Agency, using the GESI Action Plan reporting template provided in the FAM.

F. Evaluation

18. **Monitoring and review missions.** The Investment Project inception mission will be fielded soon after the Facility is approved by ADB. Regular reviews will follow at least annually and more frequently as necessary. As necessary special loan administration missions and a midterm review mission will be fielded, under which any changes in scope or implementation arrangement may be required to ensure the achievement of Investment Project objectives. NCRTC will monitor tranche and Facility implementation according to the schedule and timebound milestones and keep ADB informed of any significant deviations that may result in the milestones not being met. A Facility completion report will be submitted by the NCRTC within 6 months of physical completion of the all the tranches under the Facility, providing detailed evaluation of the progress of implementation, costs, social and economic impacts, and other details requested by ADB.

G. Reporting

19. The Executing Agency will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system, no later than 45 days after end of each quarter. The quarterly progress reports should include financial and disbursement report, variance analysis of physical and financial progress, details of utilization of funds and

reconciliation with ADB loan financial information system (LFIS); (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a Facility completion report within 6 months of physical completion of the related projects and the Facility. To ensure that the Investment Project and projects therein will continue to be both viable and sustainable, individual project accounts and the NCRTC-audited financial statements together with the associated auditor's report, should be adequately reviewed with ADB.

SCHEDULE 4

SELECTION CRITERIA AND APPROVAL PROCESS FOR PROJECTS

1. The Investment Project will finance projects identified in accordance with the following selection criteria and approval process.

A. Selection Criteria

2. Each project under the Investment Project will meet the following selection criteria and approval process:

- (i) The project will be technically feasible, least-cost and supported by a feasibility study and preliminary or detailed engineering design;
- (ii) The project will be economically feasible and financially sustainable, and its estimated economic internal rate of return equal to or higher than 9%, based on the economic analysis to be conducted in accordance with ADB's *Guidelines for the Economic Analysis of Project*;
- (iii) The project will also be environmentally and socially sound and include measures to mitigate any possible environment and social impacts in accordance with the safeguard frameworks prepared (Schedule 5) and Safeguard Policy Statement (SPS) 2009.¹⁵ For each project, a poverty and social analysis will be conducted in accordance with ADB's guidelines on poverty and social assessment. Similarly, an environmental assessment will be carried out for each project in accordance with the SPS 2009.
- (iv) Sufficient counterpart funding has been allocated to implement the project timely and efficiently in accordance with the overall implementation schedule; and
- (v) For each project, all necessary government approvals and agreements between government agencies and other relevant central and state government agencies, will be obtained, as applicable.

B. Approval Process

3. All projects will be processed in accordance with the procedure set out below:

- (i) The Executing Agency will select a possible project and will then conduct a feasibility study for the project including its cost estimate, technical and economic analysis. The Executing Agency will also prepare (a) an initial poverty and social assessment (IPSA) and fill out a checklist for (b) involuntary resettlement; (c) indigenous people; and (d) complete the Rapid Environmental Assessment (REA) checklist for screening of environmental issues.
- (ii) The Executing Agency will submit (a) appraisal reports and/or project selection and prioritization reports, (b) IPSA, and (c) completed REA checklist to ADB for further

¹⁵ Environment Assessment and Review Framework (EARF) and Resettlement Framework (RF).

review, to obtain necessary guidance with regard to the extent of relevant analysis, assessment or plans.

- (iii) ADB will review the reports submitted and, if ADB finds that a proposed project is not likely to satisfy the eligibility criteria and/or that the agreed procedures, ADB will advise the Executing Agency either (a) to modify the project proposal in a manner that will make it eligible for approval; or (b) that the project must be rejected. If ADB finds that the proposed project is likely to satisfy the eligibility criteria and procedures, ADB will advise whether, based on the resettlement checklist a resettlement plan is required, and based on the indigenous people checklist, whether an Indigenous Peoples Plan (IPP) is required. Similarly, based on the completed REA checklist it will be determined whether an Environmental Impact Assessment (EIA) report will be required (for environment category A projects).
- (iv) Following the review described in (iii) by the Executing Agency and/or ADB, the Executing Agency will conduct preliminary design and/or detailed design or other similar design works and, based on those works, develop a resettlement plan (if required) and IPP (if required), and prepare an EIA including an environmental management plan (EMP).
- (v) The Executing Agency will submit the relevant safeguard documents (the resettlement plan [if required], IPP [if required], and EIA/IEE) to ADB for final review and approval. After completion of detailed engineering designs if there is a need to prepare a revised (i) resettlement plan, (ii) IPP, and (iii) EIA/IEE, then it will be submitted to ADB for review before any contracts are awarded.
- (vi) After reviewing the appraisal reports and relevant safeguard documents, if ADB finds that the proposed project does satisfy the eligibility criteria and procedures, ADB will approve the project. If ADB finds that the proposed project does not satisfy the eligibility criteria and procedures, or does not comply with ADB's safeguard policies, ADB may (a) advise the Executing Agency on remedial actions to be taken for the proposed project in order for it to comply or (b) reject the project.

SCHEDULE 5

POVERTY AND SOCIAL DIMENSIONS AND SAFEGUARD REQUIREMENTS

1. India will ensure that all the requirements prescribed in this Schedule, and the following social and environmental safeguard frameworks that have been prepared with respect to the Facility and the first tranche and of which ADB has been provided full copies, and which are deemed incorporated herein by reference, are complied with during the processing and implementation of the projects under the Facility.

- (i) environmental assessment and review framework (EARF), dated February 2020,
- (ii) resettlement framework (RF) dated February 2020,
- (iii) environmental impact assessment (EIA) and resettlement plan (RP) dated February 2020 for the first tranche,
- (iv) environmental and social management system, and/or
- (v) gender equality and social inclusion (GESI) action plan, dated February 2020.

2. The plans cover the Facility-specific information and requirements in accordance with ADB's safeguard policies: (i) the general anticipated impacts of the projects likely to be financed under the MFF on the environment, involuntary resettlement, and indigenous peoples; (ii) the safeguard criteria that are to be used in selecting projects; (iii) the requirements and procedure that will be followed for screening and categorization, impact assessments, development of management plans, public consultation and information disclosure (including the 120-day disclosure rule, if required), and monitoring and reporting; and (iv) the institutional arrangements (including budget and capacity building requirements), and the client's and ADB's responsibilities and authorities for the preparation, review and clearance of safeguard documents.

3. Prior to the preparation of each PFR, the applicability and relevance of each safeguard plan for environmental assessment, involuntary resettlement, and indigenous people will be reviewed by India and the Executing Agency and updated to ensure relevance and consistency with applicable country legal frameworks and ADB's safeguard policies, as amended from time to time.

4. In all cases, for each new PFR preparation, India and the Executing Agency will review ongoing projects to check on the status of compliance with the social and environmental safeguard plans and frameworks, and submit the review reports to ADB, together with other required safeguard documents relevant to the projects included in the tranche being requested. In any case if major noncompliance is discovered in the course of the review of ongoing projects, a corrective action plan will be prepared and submitted to ADB.

5. Annual monitoring reports that describe the progress of the implementation of environmental activities and semi-annual monitoring reports that describe the progress of the implementation of social safeguard activities, including any compliance issues and corrective actions (if any) will be submitted to ADB.

6. The Executing Agency will have a Social and Environment Management Unit (SEMU) for the overall management of social and environment safeguards under the Investment Project. At the site-level there are four project management offices headed by a chief project manager (CPM) to manage different sections of the rail alignment. The CPM will be supported by deputy CPMs who will serve as the site-level social and environmental focal persons. The general consultants that will be responsible for supervision and monitoring of construction works will include

environmental specialists, social safeguard specialists, and health and safety experts. These experts will periodically monitor the project site-level activities. An external expert both for environment and resettlement will be recruited by NCRTC to verify the reports submitted by the general consultants, and to advise on safeguard compliance issues and corrective measures. Details are in the FAM.

SCHEDULE 6

UNDERTAKINGS

1. The implementation of the Investment Project and the projects therein shall conform to ADB's policies on safeguards, anticorruption, procurement, consulting services and disbursements, and the following undertakings.

2. India as the Borrower under individual projects under the Facility shall ensure, and shall cause its Ministry of Housing and Urban Affairs (MoHUA) acting through the National Capital Region (NCRTC) (the Executing Agency) acting through the National Capital Region (NCRTC) (the Executing Agency) to ensure the following:

Implementation Arrangements

3. India and the Executing Agency will remain committed to the implementation of the Delhi–Meerut Regional Rapid Transit System Investment Project and achieve its outcome and outputs in a timely manner.

4. In the event of any change in the road map, policy framework, the Investment Project, or financing plan for the Investment Project, India shall, and shall cause the Executing Agency, to assess, in consultation with ADB, the potential impact on the Investment Project and evaluate any change in scope, amendment, or continuation, as appropriate, of the Investment Project.

5. India shall, and shall cause the Executing Agency, to take all actions, including provision of funds (including any additional funds required for completion of project contracts), facilities, services and other resources necessary or appropriate to enable the NCRTC to perform its obligations under the legal agreements for each tranche, and for timely completion of the projects under the Facility, including any funds required to meet any shortfall between cost and revenue for the operation and maintenance of the Investment Project facilities; to mitigate unforeseen environmental and social impacts; to meet additional costs arising from design changes, price escalation in construction costs and/or unforeseen circumstances; to meet any additional funds for completion of project contracts; and to keep the project implementation unit (PIU) and project management offices (PMO) fully equipped and fully staffed in accordance with the requirements set out in the FAM.

6. India shall ensure or cause the Executing Agency to employ sufficient staff for the duration of the Facility with adequate and relevant experience and expertise in the field of project management, financial management, engineering, procurement, environmental and social safeguards implementation. The Executing Agency shall ensure that all staff members employed in connection with the Facility are provided with adequate office space, facilities, equipment, support staff and telecommunications and management information systems for the entire duration of the Facility. The Borrower and the MoHUA shall undertake best efforts to ensure that the same persons will continue to be assigned to key offices in the PIU and the site-level PMOs for the entire duration of the Facility, including, without limitation, the directors or project manager of the PIU and contract manager.

7. India, and the Executing Agency will ensure that the individual projects under the Investment Project are implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM will become effective only after approval of such change by India, the Executing Agency and ADB. In the event of any discrepancy between the

FAM and relevant legal agreements for a project under the Facility, the provisions of the legal agreements will prevail.

8. (i) India will ensure or cause the Executing Agency to ensure, towards smooth implementation of the projects under the Investment Project, that grievances if any from stakeholders, relating to implementation or use of funds under the related project are addressed effectively and efficiently.

(ii) India will ensure or cause the Executing Agency to ensure compliance with all the requirements and obligations in their part as included in the related legal agreements for a project to meet the objectives of the Investment Project in a timely and efficient manner.

9. India will ensure to get the MOU on Ghaziabad-Meerut RRTS corridor among Government of India, Government of Uttar Pradesh and the NCRTC, is signed at the earliest to ensure the section of the Investment Project that lies within the State of Uttar Pradesh (i.e., the Ghaziabad - Meerut section) is implemented in time in accordance with the provisions of the stated MOU by all parties, to contribute to (i) the economic growth and development in general and (ii) development of infrastructure in particular, in the State of Uttar Pradesh, that acknowledges that the RRTS in this regard is used for operation of metro rail services in the city of Meerut to meet local mobility needs.

Counterpart Support; Funds

10. India will ensure or cause the MoHUA to make available the loan proceeds under individual tranches to the Executing Agency under appropriate arrangements acceptable to ADB, and ensure:

- (i) sufficient counterpart funds from its budget for each fiscal year, in a timely manner, for the efficient implementation of the projects under the Facility; and
- (ii) adequate funds towards operations and maintenance of project facilities, through budgetary allocations or other means, to be provided to the Executing Agency, during and after projects' completion under the related project and the Facility.

11. Notwithstanding the generality of the above paragraph, consistent with India's Presidential Sanction Order for the Delhi-Ghaziabad-Meerut RRTS corridor dated 07 March 2019, India will ensure or cause the Executing Agency to ensure that MOHUA, state governments of Uttar Pradesh, National Capital Territory, as applicable shall

- (a) provide counterpart funds in their respective proportions in accordance with, all on a timely basis for efficient implementation of the Project. India will ensure that MOHUA, and the cited state governments shall be responsible for meeting the financial responsibilities and obligations of the NCRTC for the Investment Project including operations and management and debt servicing liabilities of NCRTC;
- (b) allow commercial utilization of land falling in the Project area on mutually agreed terms and provide all necessary support for providing NCRTC with the requisite commercial development rights for augmentation of non-fare box revenue of the Investment Project;

- (c) ensure facilitation of coordinated planning and implementation of the Investment Project including through setting up a Unified Metropolitan Transport Authority (UMTA); and a dedicated urban transport fund (UTF) at the State level and city/metropolitan level to also create pool of resources for replacement of assets, providing operational subsidies, if any, required; and
- (d) prepare and adopt enabling policy frameworks to allow NCRTC to enhance non-fare box revenues.

Coordination; Co-Financing

12. India shall keep ADB informed of discussions with other multilateral, bilateral and national aid agencies, particularly involvement of Asian Infrastructure Investment Bank and the Japan Fund for Poverty Reduction (JFPR), that may have implications for the implementation of the Investment Project. India shall provide ADB with an opportunity to comment on any resulting policy reform and/or investment proposals and shall take into account ADB's views before finalizing and implementing any such proposals.

13. India shall ensure or cause the Executing Agency to ensure that all relevant government and state government approvals, permissions and financial support if any required, are in place including in particular from the state agencies as they may be applicable towards timely implementation of the projects under the Investment Project.

14. India will ensure or cause the Executing Agency to ensure that all funds under the co-Financing arrangements for the Investment Project are implemented on a timely basis in accordance with underlying legal agreements to ensure efficient and timely implementation of the projects under the Facility.

Technical Assistance

15. India shall ensure or cause the Executing Agency to ensure that the technical assistance provided under the Investment Project and related output to be developed from such assistance is completed on a timely basis in consultation with the ADB including from the JFPR Grant and the transaction TA.

Operations and Maintenance (O&M)

16. India shall or shall cause the MoHUA, to ensure that appropriate budgetary and human resource allocations are made for the continued O&M of the Investment Project facilities, such as bridges, viaducts, tunnel, buildings, the depot and stations, once they have been commissioned and become operational under the Investment Project both during and after completion of the Facility.

17. Notwithstanding the foregoing, India shall or shall ensure through the MoHUA, that O&M for Investment Project facilities is provided by MoHUA until such time as MoHUA and the NCRTC or other relevant authorities make appropriate arrangements for (i) the ownership transfer of such Investment Project facilities, and (ii) continued O&M by the relevant authorities.

18. India will ensure or cause the Executing Agency to ensure that (i) NCRTC or the agency appointed by NCRTC operates and maintains the facilities developed under the Facility in a timely

and appropriate manner; and (ii) funds required for the operations and maintenance of the facilities financed under the Facility are allocated annually and released in a timely manner.

Safeguards

Environment

19. India will ensure, or cause the Executing Agency to ensure, that the preparation, design, construction, implementation, operation and decommissioning of the Investment Project and all facilities under the Facility comply with (i) all applicable laws and regulations of India and the relevant State relating to environment, health and safety; (ii) the Environmental Safeguards; (iii) EARF; (iv) all measures, and requirements set forth in the EIA and EMP; and any corrective or preventative actions set forth in a Safeguards Monitoring Report.

Land Acquisition and Involuntary Resettlement

20. India will ensure, or cause the Executing Agency to ensure, that all land and all rights-of-way required for the projects under the Investment Project are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (i) all applicable laws and regulations of India and the related State relating to land acquisition and involuntary resettlement; (ii) Involuntary Resettlement Safeguards; (iii) the RF; (iv) all measures and requirements set forth in the RP or its update, and any corrective or preventative actions set forth in the Safeguards Monitoring Report.

21. Without limiting the application of the Involuntary Resettlement Safeguards, or the RP, India will ensure, or cause the Executing Agency to ensure, that no physical or economic displacement takes place in connection with the Project until:

- (i) compensation and other entitlements have been provided to affected people in accordance with the RP; and
- (ii) a comprehensive income and livelihood restoration program has been established in accordance with the respective RP.

Indigenous Peoples

22. India will ensure, or cause the Executing Agency to ensure, that the preparation, design, construction, implementation and operation of the Investment Project and all facilities under the Facility comply with (i) all applicable laws and regulations of India and the related State relating to indigenous peoples; (ii) the Indigenous Peoples Safeguards; (iii) the IPDF; (iv) all measures and requirements set forth in the respective IPP (as applicable), and any corrective or preventative actions set forth in a Safeguards Monitoring Report.

Human and Financial Resources to Implement Safeguards Requirements

23. India will ensure or cause the Executing Agency to ensure that all necessary budgetary and human resources to fully implement each of the EMP, RP and IPP (as applicable) for projects under the Facility, are made available on a timely basis.

Safeguards – Related Provisions in Bidding Documents and Works Contracts

24. India will ensure, or cause the Executing Agency to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to:

- (i) comply with the measures and requirements relevant to the contractor set forth in the EIA, the EMP, the RP and IPP (as applicable), and any corrective or preventative actions set forth in a Safeguards Monitoring Report;
- (ii) make available a budget for all such environmental and social measures;
- (iii) provide the Executing Agency with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EIA, the EMP, the RP and the IPP (as applicable);
- (iv) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and
- (v) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-Project condition upon the completion of construction.

Safeguards Monitoring and Reporting

25. India will ensure or cause the Executing Agency to ensure the following:

- (i) submit semi-annual Safeguards Monitoring Reports to ADB no later than 3 months after the end of the respective reporting period to which each relates, and disclose relevant information from such reports to affected persons promptly upon submission;
- (ii) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIA, the EMP, the RP and the IPP (as applicable), promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;
- (iii) throughout the term of each tranche under the Facility, engage qualified and experienced external experts or qualified non-governmental organization(s), under a selection process and terms of reference acceptable to ADB, to verify information produced through the project monitoring process, and facilitate the carrying out of any verification activities by such external experts; and
- (iv) report any breach of compliance with the measures and requirements set forth in the EMP, the RP or the IPP (as applicable) promptly after becoming aware of the breach.

Prohibited List of Investments

26. India will ensure, or cause the Executing Agency to ensure, that no proceeds of the loan under individual Project under the Facility are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.

Labor Standards, Health and Safety

27. India will ensure or cause the Executing Agency to ensure that Works contracts under each project under the Facility follow all applicable labor laws of India and the related states, and the Safety, Health and Environment (SHE) Manual and Plan, and that these further include provisions to the effect that contractors: (i) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions. Such contracts will also include clauses for termination in case of any breach of the stated provisions by the contractors.

Communications and Participation

28. India will ensure or cause the Executing Agency to ensure that the Project is undertaken in conformity with the stakeholder communication strategy as agreed between ADB, India, and the Executing Agency and referred in the FAM.

Gender and Development

29. India will ensure or cause the Executing Agency to ensure that under each tranche of the Facility (i) the GESI AP is implemented in accordance with its terms; (ii) the bidding documents and contracts include relevant provisions for contractors to comply with the measures set forth in the GESI AP; (iii) adequate resources are allocated for implementation of the GESI AP; and (iv) progress on implementation of the GESI AP, including progress toward achieving key gender outcome and output targets, are regularly monitored and reported to ADB.

Procurement

30. India will ensure, or cause the Executing Agency to ensure throughout the implementation of the Investment Project, that:

- (i) the procurement of Goods, Works and Services is carried out in accordance with the Procurement Policy and the Procurement Regulations;
- (ii) Goods, Works and Services will be procured based on the detailed arrangements set forth in the Procurement Plan, including the procurement and selection methods, the type of bidding documents, and ADB's review requirements. India through the Executing Agency may modify the detailed arrangements set forth in the Procurement Plan only with the prior agreement of ADB, and such modifications must be set out in updates to the Procurement Plan; and
- (iii) (a) all Goods and Works procured and Services obtained (including all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party; and (b) all contracts for the procurement of Goods, Works and Services contain appropriate representations, warranties and, if appropriate, indemnities from the contractor,

supplier, consultant or service provider with respect to the matters referred to in this subparagraph.

31. For each individual project under the Facility, India will ensure, or will cause the Executing Agency to, announce the project and business opportunities (i.e., invitation of potential bids) associated with the project on its website. The website will disclose the following information in relation to Works and Services procured for the project: (i) the list of participating bidders; (ii) the name of the selected bidder; (iii) the amount of the contracts awarded; and (iv) the services procured.

32. Towards minimizing operational risks, India will ensure or cause the Executing Agency to ensure that the shadow operator, engaged under the ADB's transaction technical assistance, will provide operational expertise during the design and construction phases of the Investment Project. The shadow operator will review plans and designs to support decision making in ensuring efficiency and cost effectiveness, as well as ensure that the designs include long-term requirements of operations and maintenance.

33. India will ensure or cause the Executing Agency to ensure that the station designs will incorporate EWCD-inclusive features to provide universal accessibility.

Condition for award of contracts

34. For each project under the Facility, India will ensure, or cause the Executing Agency to ensure, that no Works contract is awarded which involves environmental impacts until the Executing Agency has:

- (i) prepared, submitted, and obtained final approval of the relevant EIA from ADB and the relevant forest and environment clearances from statutory authorities of India and the relevant states as applicable; and
- (ii) incorporated the relevant provisions from the respective EMP into the related Works contract.

35. India will ensure, or cause the Executing Agency to ensure, that no Works contract is awarded which involves involuntary resettlement impacts until the Executing Agency has prepared and submitted to ADB the relevant final RP based on the related RRTS detailed design and obtained ADB's clearance of such RP or its update thereof.

36. India will ensure, or cause the Executing Agency to ensure, that no Works contract is awarded which involves impacts on indigenous peoples, if any, until the Executing Agency has prepared and submitted to ADB the relevant final IPP (as applicable) and obtained ADB's clearance of such IPP.

Condition for Issuing Bids

37. (a) India will ensure or cause the Executing Agency to ensure that the relevant EMP is included in the bidding documents.

(b) India will ensure or cause the Executing Agency to ensure that both the EMP and India's SHE guidelines is included in the bidding documents for each contract package before starting the bidding process and also included in the final contract agreement with the contractor.

Governance and Anticorruption

38. India will ensure and cause the Executing Agency to comply with ADB's Anticorruption Policy (1998, as amended to date) and (i) will ensure that the anticorruption provisions acceptable to ADB, India and the Executing Agency are included in all bidding documents and contracts financed by ADB in connection with the individual projects under the Facility, including provisions specifying the right of ADB to review and examine the records and accounts of the Executing Agency and all contractors, suppliers, consultants, and other service providers as they relate to the projects and the Facility, and as included in the FAM; (ii) will allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the projects; (iii) acknowledge that ADB reserves the right to investigate directly or through its agents any alleged corrupt, fraudulent, collusive or coercive practice relating to the projects; and (iv) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation, and as included in the FAM.

Institutional Reforms

39. India will ensure or cause the Executing Agency to ensure that NCRTC adopts and implements following in a time bound manner

- (i) the Financial Management Action Plan (FMAP) as included in the FAM on a timely basis as per the timelines provided in the FAM;
- (ii) the Gender-Friendly Workplace Policy to be developed and adopted by June 2021;
- (iii) the Accounting Policies and Procedures Manual (to be prepared and adopted by December 2020);
- (iv) sets up the dedicated SEMU with adequate and qualified staff to implement and monitor the safeguard and social requirements, including the SHE manuals for the projects under the Facility all as detailed in the FAM;
- (v) establish a dedicated interagency cooperation unit with adequate focal point and staff to receive and coordinate interagency cooperation including the multilateral donors and bilateral donors that are or will become involved in the development of forthcoming corridors under the three priority corridors based on the Functional Plan adopted by NCRTC for the RRTS in the NCR.

40. India will ensure or cause the Executing Agency to ensure that the NCRTC staff avail of and undergo the requisite training on ADB policies and procedures including on safeguards, accounts, and financial management.

41. The Borrower shall ensure or cause the MOHUA to actively pursue consistent with the National TOD Policy 2017, the TOD Policy for Delhi, 2019, the Mixed Use and TOD Bylaws for Uttar Pradesh, 2015, and the Metro Rail Policy, 2017 (all including as amended from time to time) towards ensuring the required rates of return and cost recovery for metros and the RRTS, multimodal integration and last mile connectivity, and tap all options of central assistance for

metro rail projects, including: (i) public-private partnership, (ii) grant by the central government, corporate debt bond issuances and (iii) equity-sharing in NCRTC.¹⁶

Financial Covenants

42. India will ensure or cause the Executing Agency to ensure that NCRTC shall at all times achieves a current ratio of at least 1.00. The term "current ratio" shall mean the ratio of current assets, including cash, to current liabilities.

43. India will ensure or cause the Executing Agency to ensure that NCRTC shall maintain a corporate debt to equity ratio of not more than 60:40 for the financial year ending 31 March 2020 and thereafter. For the purpose of this paragraph, the term "equity" means the sum of the total unimpaired paid-up capital, retained earnings, reserves of NCRTC not allocated to cover specific liabilities, and subordinate debt by the sponsors of NCRTC and the term "debt" means any outstanding indebtedness of NCRTC, but excluding any amount due for payment within 1 year of the date as of which this ratio is computed and subordinate debt by the sponsors of NCRTC.

44. India will ensure or cause the Executing Agency to ensure that the Investment Project is financially sustainable for the Investment Project period and thereafter based on the financial sustainability analysis of NCRTC's projected revenues, debt and O&M expenditures.

45. India will ensure or cause the Executing Agency to ensure that NCRTC provides ADB with all details of the new revenue streams, which may enhance the Investment Project's financial sustainability.

Public-private partnership Initiatives

46. India will ensure or cause the Executing Agency to ensure that NCRTC

- (i) will actively coordinate with ADB on the various Public-private partnership initiatives that will be explored for assistance under the Investment Project for greater private sector participation that is also in line with India's Metro Rail Policy, 2017. These will include the areas of (i) performance-based contracts for rolling stock; (ii) operations contract; and (iii) provision of logistics services in using Delhi-Meerut RRTS; and
- (ii) develops and approves, by December 2020, a road map or an action plan for procuring private sector participation for undertaking O&M of the RRTS.

Transit Oriented Development and Value Capture Financing Initiatives

47. India will ensure or cause the Executing Agency to ensure that NCRTC

- (i) establishes a dedicated unit to explore value capture financing) (VCF) and transit-oriented development (TOD) initiatives of NCRTC; and

¹⁶ Government of India, Ministry of Housing and Urban Affairs. 2017. *National Transit Oriented Development Policy*. New Delhi; Government of India, Ministry of Housing and Urban Affairs. 2017. *Metro Rail Policy*. New Delhi.

- (iii) ensures that TOD and VCF initiatives road map is developed and adopted by the NCRTC by June 2021 to be implemented during the implementation of the Investment Project and after its completion.

Beneficiary Awareness and Sensitization

48. India will ensure or cause the Executing Agency to ensure that the beneficiary commuters on the RRTS to be developed under the Investment Project are

- (i) sensitized to the use and benefits of the RRTS towards long term sustainability of the facilities developed. The Executing Agency shall undertake stakeholder participation and awareness seminars and workshops to advocate the benefits of the RRTS; and
- (ii) educated on the multimodal integration that will be provided through elevators, walkways, escalators and underpasses, depending on the location, to ensure that commuters get seamless transit options to metro lines, bus terminals, or other transport modes.

