



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

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**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
India	SOUTH ASIA	P177666	
Project Name	Delhi-Gurugram-SNB Regional Rapid Transport System (RRTS) Corridor		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Transport	Investment Project Financing	12/1/2022	3/30/2023
Borrower(s)	Implementing Agency(ies)		
Government of India	National Capital Region Transport Corporation		

**Proposed Development Objective**

The proposed Program's Development Objective is to provide safe, green, and sustainable accessibility along the Delhi-Gurugram-SNB corridor.

Financing (in USD Million)	Amount
<b>Total Project Cost</b>	<b>5278.00</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

The Delhi-Gurugram-SNB RRTS project will connect with the Delhi-Ghaziabad-Meerut RRTS Corridor at Sarai Kale Khan Station through seamless passenger movement between the two corridors. A high-speed (180km/h design speed) and high-frequency (5 min headway), rapid transit rail system (RTTS) will be implemented and will promote regional connectivity within the SNB urban complex in Rajasthan, Ghaziabad and Meerut in Uttar Pradesh, and Rewari, Dharuhera, Gurugram in Haryana, through Delhi. In addition to this, the project will support the development of gender and disability-inclusive diagnosis and design; as well as support to increase the financial sustainability and scalability of the RTTS, through TOD, multimodal integration, and asset monetization strategies. The MPA over three



phases, comprises of IPF investments in three phases - divided as 30km in Phase 1, 40km in Phase 2, and the rest in phase 3.

The total route length of the entire Delhi – SNB RRTS Corridor is 106.5 km, of which 35.94 km will be underground, and 70.56 km will be elevated. Of the 70.56 km elevated portion of the proposed alignment, 58 km of the length is mainly planned over the road medians of old Delhi-Gurugram Road, Sector-17 Road in Gurugram and Right of Way of NH-48 up to SNB (Rajasthan State Border). With 11 elevated and 05 underground stations, the alignment will have a total of 16 stations between Sarai Kale Khan and SNB. The length of proposed route passing through Delhi will be 22.08 km (21.86 km underground, and 0.22 km elevated), 82.48 km (14.08km underground, 68.40km elevated) in Haryana and 1.94 km (elevated) in Rajasthan.

The operation is proposed as IPFs (as part of MPA) to support implementing RRTS (civil works, tracks, systems, rolling stock), as well as consultancy and TA for designing climate-informed and gender-inclusive designs, safety audit, TOD and multimodal integration under all three components of the proposed MPA.

NCRTC has already initiated preconstruction activities and has tendered out the execution of enabling civil works and works related to shifting of utilities such as water pipeline, electric lines, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom works, planning and design consultancies for depots, elevated and underground stations, and geotechnical investigations in multiple locations.

#### **D. Environmental and Social Overview**

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project would be implemented mostly in the complex urban /peri-urban and rural areas of the National Capital Region (NCR; a highly urbanized multi-state region with the National capital, Delhi as its center) in north-central India, involving significant and sensitive environmental components and congested locations. The RRTS alignment (106.50 km; of which 35.94km is underground) passes through the region which hosts various investment regions, industrial corridors, urban centers, airports, and high-speed rail/metro developments. Climate is mostly semi-arid with minimal rainfall falling under seismic zone IV as per the Seismic Zoning Map of India (IS1893, Part-I, 2002). There are many parks, gardens (eg: Millennium park), biodiversity areas (Aravalli Biodiversity Park), zoological parks, some forest areas (Eg: Sehrawan Village) educational, religious, public, and commercial areas, major water bodies including rivers (Yamuna, Masani (with barrage)), Lake (Sanjay Jheel), and cultural heritage areas. Specifically, the project shall traverse 7 districts across three states of Delhi (South Delhi, New Delhi, South-West Delhi, South East Delhi), Haryana (Gurugram and Rewari), and Rajasthan (Alwar). In terms of population as per Census 2011, Delhi, Haryana, and Rajasthan have a population of 1.67 crores, 2.54 crores, and 6.86 crores respectively. In terms of sex ratio, Delhi has 933 per thousand, Haryana has 878, Rajasthan 928 per thousand. In terms of tribal population, the Alwar district of Rajasthan has 7.87% tribals, while Haryana and Delhi do not have STs.

#### **D. 2. Borrower’s Institutional Capacity**

The Borrower is National Capital Region Transport Corporation (NCRTC) – a joint venture company of Govt of India and the States of Delhi, Haryana, Rajasthan, and U.P, under the administrative control of the Ministry of Housing and Urban Affairs, formally incorporated as a company in 2013, is mandated for implementing the Regional Rapid Transit



System (RRTS) project across the NCR of India, ensuring a balanced and sustainable urban development through better connectivity and access. The implementing agency; namely, NCRTC has an E&S team headed by a Chief Engineer (General) to manage the E&S aspects and is experienced in following ADB safeguards and Occupational and Community Health and Safety aspects for the Delhi – Meerut RRTS Corridor that is under construction. However, NCRTC has no prior experience with WB Safeguards Policies or ESF. An E&S capacity assessment will be carried out as part of the ESIA to evaluate the E&S capacity and staffing of NCRTC, identify gaps and develop an action plan to strengthen its E&S staffing and capacity.

## II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC)

High

#### Environmental Risk Rating

High

Environmental Risk is rated ‘High’ given the high-risk investments to be implemented mostly in the complex urban, peri-urban and rural setting of the NCR, involving significant and sensitive environmental components and some areas of high dense developments. During the concept stage, the team carried out interactions and site visits with the NCRTC and discussed the risks associated with ongoing pre-construction activities to understand and assign an initial risk classification. The project is beneficial for the commuters in the region; reducing travel time, pollution due to private modes, and congestion; inducing a spurt of development along the corridor with its support of TOD, planned development and improved access to all sections of the population. Environmental risks during pre-construction and construction stages include pollution and temporary disturbances to habitats and landscape and safety issues including: (i) long term and irreversible land use conversion and changes; (ii) impacts on water environment and biodiversity of rivers, forest areas, (iii) noise and vibration due to construction activities disturbing surrounding structures (especially; infrastructure like barrages, structurally unsafe buildings including Heritage structures if any, nearby) and sensitive receptors; (iv) light, water, air (dust, SO2, NOx, Particulates, CO, and unburnt hydrocarbons), land pollution, safety issues (eg: electrical works, excavations, tunneling), and disturbance to fauna/flora and nearby communities (v) disturbance to drainage in the project area due to embankment and tunnel constructions and borrowing of earth, (vi) occupational health and safety risks (life and fire safety) during to shifting of utilities, material transport, storage, construction of tunnels, on-ground and elevated parts), electrical installations, and modal interchanges; (vii) management of liquid and solid wastes – including drainage, sewage from labour camps, and waste water, large quantities of construction and demolition waste which may include bentonite, soil, existing asbestos, batteries, hazardous wastes, e-wastes which need to be disposed carefully, and solid wastes (including plastics), (viii) labor camps or stay facilities in or around nearby areas and related pollution; (ix) possible disturbances to heritage areas or natural habitats areas near facilities created and activity areas. Impacts and risks during operation stage include: (i) activity footprint with heightened pressure on resources in the immediate region of the RRTS/TOD corridor; (ii) increased possibilities for pedestrian and vehicular conflicts and congestion around the station /parking area; (iii) noise, light, water, air, land pollution, safety issues (eg: electrical works), and disturbance to fauna/flora and nearby communities due to O&M; (iv) occupational health and safety risks (life and fire safety) during O&M while shifting utilities, material transport, storage, operation of electrical installations, maintenance works, ; (v) management of liquid and solid wastes during O&M which may include existing asbestos, batteries, hazardous wastes (for eg: from refrigerants used for artificial cooling; solar panels if used, oil/fuels during maintenance), e-wastes, and solid wastes (including plastics), (vi) increase in stay facilities, related pollution and burden on shared resources; (vii) increase in ambient heat and changes in micro-climate; (viii) possible disturbances

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to heritage areas or environmental components near facilities /activity areas during train operation and increased activities; (ix) higher risks during emergencies/natural and man-made disasters especially in tunnels/underground sections.

**Social Risk Rating**

High

The social risks are rated as High as the project will lead to impacts on land, structures, livelihoods, labor and labor influx issues, SEA/SH. Though NCRTC has significant experience in planning and constructing a similar corridor in congested urban locations under its ongoing Delhi-Meerut RRTS and has gained extensive experience in the management of social impacts and is familiar with ADB's requirements. However new and different locations and contexts across three states will still pose a challenge. Already using the principle of the mitigation hierarchy, NCRTC kept the availability of government land as one of the key considerations in selecting its corridor alignment and aims to further minimize impacts, wherever possible such as while finalizing the locations of stations. Even though design features such as elevated and underground tracks and stations have helped to minimize impacts, it is estimated that the project shall: impact approximately 153 ha of land including 33 ha of private land; impact structures and involve physical and economic displacement of shops/street-side vendors particularly at stations locations. Prolonged construction stage civil works are likely to result in impacts on livelihoods, access to communities and adjoining structures. Significant labor influx is anticipated that could lead to SEA/SH and labor issues. Further there could be risks related to community safety/traffic due to the proximity of residences along the corridor. Engaging with a multitude of stakeholders, across three project states – Delhi, Haryana and Rajasthan particularly institutional stakeholders shall add to the complexity of the effective engagement.

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**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

**B.1. General Assessment**

**ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

***Overview of the relevance of the Standard for the Project:***

ESS1 is Relevant. Project beneficiaries shall include all commuters currently and in the future using road transport either for personal, educational, or work-related travel. The project will significantly enhance a safer commuting experience, particularly for women and other disadvantaged and vulnerable groups such as those physically challenged through design features such as separate coaches, designated seats and information signages and public announcements, separate toilets for differently-abled, etc.

The project can have adverse risks and impacts on the biophysical environment due to the proposed infrastructure development in the high dense urban /peri-urban areas and sensitive locations close to which project activities will be undertaken. The potential environmental risks and impacts based on screening are detailed under the environmental risk rating above. Environmental risks are rated High as the project will lead to pollution and disturbances to habitats/landscape (for example rivers, forests other biodiverse areas which may be present along the proposed corridor such as Masani River, Millennium Park, and the land of Sehravan village) and safety issues during the long construction stage and operations. Even though the proposed alignment avoids designated wildlife protected areas, and is planned underground in the case of Aravalli Biodiversity Park and National Zoological Park, and elevated near Sehravan are considered to support biodiversity, the impacts need to be assessed during preparation. There is also a need to coordinate with multiple agencies involved in the management of the sensitive



locations including Urban Local Bodies, the National Capital Region Authority, state Forest Departments, the Ministry of Environment Forests and Climate change, etc.

The project provides opportunities to improve resource use and efficiency and better planning and management, at all stages; through early involvement. A detailed description of the nature and magnitude of impacts, risks and proposed mitigation measures will be presented and is assessed in the Appraisal stage ESRS when there is more clarity on the type of development and support infrastructure and associated facilities.

The social risks and impacts are rated High as the project will lead to impacts on land, structures, livelihoods, labor and labor influx issues, SEA/SH. Even though design features such as elevated and underground tracks and stations have helped to minimize impacts, it is estimated that the project shall: impact approximately 153 ha of land including 33 ha of private land; impact structures and involve physical and economic displacement of a few shops/street-side vendors, particularly at stations locations. Prolonged construction stage civil works are likely to result in impacts on livelihoods, access to communities and adjoining structures including impacts to community assets such as religious structures etc. Significant labor influx is anticipated that could lead to SEA/SH and labor issues. Engaging with multitude of stakeholders, across three project states – Delhi, Haryana and Rajasthan particularly institutional stakeholders shall add to the complexity of the effective engagement. Preliminary surveys have confirmed that no tribal groups would be affected.

At this stage, 8 of the 10 ESSs are relevant for this project/this phase of MPA and these will be further verified during preparation and confirmed by appraisal. ESS 7 and ESS 9 are not deemed relevant at this stage. By appraisal, an Environmental and Social Impact Assessment (with an assessment of cumulative impacts) would be made ready to support Component 1. ESIA is currently underway following the agreed TORs and according to observations provided on the Inception Report and preliminary Stakeholder Engagement Plan. NCRTC had initiated pre-construction activities for the RRTS construction including road widening, construction of pillars at Atul Katariya Chowk, tree felling/tree plantation, etc. An Environmental and Social Audit will be undertaken as part of ESIA so that adherence to the Environmental and Social management principles in line with the Banks' requirements could be confirmed to the management during the project approval process and corrective measures will inform ESIA / ESMP & ESCP. Till such time ESIA / ESMP is prepared and adopted, NCRTC shall ensure the inclusion of National Regulatory requirements/guidance on Occupational Health and Safety and Community Health and Safety in the bid documents for preconstruction activities and follow good practices like the National Highway Authority of India (NHAI) Safety Manual for relevant road related works to ensure E&S and safety at work on ongoing/planned contracts for preconstruction activities (road widening, construction of pillars, etc). Associated facilities identified at this stage also include power lines and transformer stations. These will be confirmed further during the preparation stage as part of ESIA.

The ESIA proportionate to the project risks will help in (a) understanding the possible risks and impacts envisaged from project activities, b) reviewing existing national/state/local level regulations, requirements under ESF, EHS, and GIIP, and gaps; (c) arriving at mechanisms to avoid impacts, and reduce, manage and mitigate risks; d) evaluating institutional capacities and resources required for environmental management applying the ESF and applicable ESSs. ESIA will be carried out through required studies, modeling, to assess and manage risks (including cumulative impacts on social and environment receptors), to prepare ESMP and arrive at the resources, schedule, and arrangements to implement mitigation measures and best practices. Considering the large numbers of important TA/design consultancies which inform the design and implementation of RRTS / TOD; ToRs for TA, Design, and capacity building



will incorporate requirements to consider E&S aspects during the assessment, preparation and implementation stages (under the MPA) and this will be agreed with NCRTC as part of ESCP. It is important to enhance E&S capacity for subsequent phases and other corridors through a capacity building program agreed upon as part of ESCP. Design consultancies, particularly for stations, will ensure that stakeholders particularly women and physically challenged will be consulted for inputs before the finalization of designs. Since the project is co-financed with ADB and JICA (JICA partnership will be confirmed by appraisal), a common approach to the management of environmental and social aspects is under discussion. Once the approach is finalized during the preparation stage, this will need to be discussed and agreed upon with the CESSO/OPCS and will be recorded in the A-ESRS and ESCP. The project's Environmental and Social Commitment Plan (ESCP) will include details on the proposed Common Approach to the management of E&S aspects; a list of commensurate capacity-building measures and training; and actions for IA along with timelines.

**Areas where “Use of Borrower Framework” is being considered:**

Borrower frameworks will not be pursued for this project. The project will apply the Bank's Environmental and Social Framework (ESF) in addition to regulations at the National level and respective State levels related to the environment and social aspects. Since ADB and JICA (JICA partnership will be confirmed by appraisal) partner to finance the RRTS, a discussion on a 'common approach' is ongoing. A Common approach would ensure agreement to apply ADB/JICA provisions that are consistent with ESF.

**ESS10 Stakeholder Engagement and Information Disclosure**

ESS10 is Relevant. In accordance with the ESS requirement of identifying stakeholders under the three categories, the Project undertook a stakeholder analysis, i.e., an in-depth look at each group's interest, how they will be affected, and to what degree and what influence they could have on the project. These involved project-affected persons including landholders, non-titleholders, and street vendors particularly at certain urban village locations in Delhi. In terms of other interested parties, it identified certain interested parties such as local communities and key institutional stakeholders with whom the project will require the project to engage to interact with land transfer or during construction. These include agencies/departments such as Municipal corporations of project districts, Ministry of Defense, Indian Railways, highways, industrial and commercial complexes, religious entities, educational institutions, that fall en-route, etc., and for the support activities.

In addition, disadvantaged and vulnerable groups include those physically challenged/differently able and other vulnerable groups/households who might be impacted in varying degrees, particularly during construction works. As part of the preparation, the project would undertake specific consultations and identify topics, modes, and frequency of engagement with these stakeholders; information that needs to be disclosed and sought feedback on; assess NCRTC's current GRM, its efficacy and provide recommendations if any specifically towards improving its uptake, accessibility and redressal timelines. All these elements would be incorporated in the SEP. The IA – NCRTC shall contract a Communication specialist to support SEP preparation and consultations with stakeholders on the draft and during the implementation stage.

**B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

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### **ESS2 Labor and Working Conditions**

ESS2 is Relevant. The project will involve direct workers i.e. employees of NCRTC -- HQ and site offices. It will involve large civil works contracts and therefore Civil works contract labor - skilled, semi-skilled, and unskilled workers are expected to contribute a major proportion of contracted workers. Further, the project will also engage direct workers such as consultants for work related to its core functions such as consultants preparing detailed design consultants for corridor designs, station designs, feasibility consultants for TOD related studies; consultant agencies that are undertaking surveys for Land acquisition, preparing ESIA and commensurate mitigation plans; other consultants undertaking various related studies. Life and Fire Safety standards will be internalized in the RRTS design, and operations manual; and will include guidance for worker safety during preconstruction, construction, and O&M stages.

No primary supply workers and community workers are envisaged at present. These shall be further assessed during the preparation of ESIA and confirmed.

Preparation of ESIA will assess the following aspects of the preparation of Labor-Management Procedure: applicability of labor laws, non-discrimination and equal opportunity, potential risks of child labor and forced labor, including the workers to be brought to the project by brokers (sub-contractors); labor influx issues, potential SEA/SH issues; grievance mechanism to all workers, occupation health and safety aspects, etc. It also covers aspects relating to COVID 19 following the WB's interim note on COVID-19. Occupational Health and Safety (OHS) Management Plans will be required from the construction contractor and operators who will implement it.

### **ESS3 Resource Efficiency and Pollution Prevention and Management**

ESS3 is Relevant. From a resource efficiency perspective, ESIA & ToR for TAs will include considerations for energy efficiency, water use efficiency, and raw material usage consistent with ESHS and the borrower will adopt measures specified in the EHSs to optimize energy, water, and raw material usage, to the extent technically and financially feasible. Resource efficiency measures should be analyzed as part of the ESIA and TA will incorporate the need to analyze the need and availability of the resource, use of available natural light and ventilation, best alternate technologies such as the use of alternate energy sources, use of solar power, and use of energy-efficient fixtures. Possibility of biomass-based renewable energy systems (for example, anaerobic digestion of solid waste and liquid effluents from depot cum workshop, stations/multimodal transit centers, offices; and can create useful energy from organic waste). Minimal use of raw materials and reuse /recycling of construction and demolition wastes (C&D) and reuse and recycle of material and wastes will be ensured. RRTS construction will be resource-intensive, and materials need to be sourced from authorized sources in Rewari and Jaipur, as mining activity is banned in Gurgaon and Alwar Districts of Haryana and Rajasthan respectively as per Supreme Court order.

Water demand will increase during the construction phase for meeting our drinking and domestic water requirements of workers, and staff, in addition to water needs for construction purposes. Water use efficiency will be incorporated in all project activities through minimizing runoff and ensuring water harvesting, protection of existing water sources, use of water conservation features in fittings, and recycling/reuse of water and wastewater. To ensure pollution prevention and management, the project will ensure the prevention of the release of pollutants to air (dust, SO<sub>2</sub>, NO<sub>x</sub>, Particulates, CO, and unburnt hydrocarbons), water, and land due to routine, nonroutine, and accidental circumstances. Special design considerations for storage of fuels and materials during construction & operations, control of silt runoff & pollution due to storage and management of construction materials and raw materials, minimization and management of solid wastes including plastics (from construction, labor camps, depots, offices),





batteries and hazardous (including Asbestos, bentonite, solar panels, wastes and oils from depots, etc.), e-waste (refrigerants from air-conditioners and cooling systems, computers and peripherals, digital displays and announcement systems), sludge from ETP/STP of Depots and support facilities and C&D wastes generated during preconstruction activities (eg: utility shifting), construction (eg: tunneling, pile caps, demolitions, excess construction materials, etc) & operation stages. Infrastructure for managing wastes and disposal of inert/rejects and other contractual obligations for minimizing wastes (on priority) and managing these will be included in relevant contractual arrangements of the project, particularly the technical design and construction contracts. Impact of light, noise and air pollution and impacts on land use/receptors will be managed by proper planning, incorporating the best practices and ESHS guidelines in detailed design and construction technology/mechanism/schedule to minimize its risks to the environment and the communities. Also, ESIA will include (i) the baseline noise monitoring and operational phase cumulative traffic noise modeling; (ii) expected increased impacts on ambient air quality from projected increased road utilization by vehicles, using established models, (iii) Estimate carbon and GHG emissions due to implementation of the Project and identify feasible measures for resource efficiency, (iv) assessment the potential for surface runoff from road surfaces during the operations phase and propose appropriate mitigation measures where erosion risks are high, such measures to improve drainage and/or slope stability; (v) identify all source of hazardous and non-hazardous waste and propose mitigation measures proportional to the level of risk, and waste management plans.

NCRTC has an Energy Management Policy and Solar Policy to encourage the use of renewable energy and reduce the emission of greenhouse gases. There are opportunities to reduce energy consumption by using energy-efficient equipment for traction, air conditioning systems, lighting, power factor improvement, and others during the design stage, and rationalizing headway, improving driving techniques, coasting during the run, reducing dwell time and other measures during operations. Energy efficiency and cooling can also be achieved by using renewable energy where appropriate, greening, proper siting, and material selections to reduce latent heat.

#### **ESS4 Community Health and Safety**

ESS4 is Relevant. The Health and safety of the communities are important during the construction stage, mainly as these will occur along/on/under main traffic corridors where the density of development and traffic will be higher. Community health and safety (OCHS) risks and public inconvenience due to the shifting of utilities, material transport, storage, construction and maintenance activities, and modal interchanges are important. The ESIA will evaluate the risks and impacts of the project on the health and safety of the communities during its life cycle and propose management measures following the mitigation hierarchy, such as emergency response measures which will be incorporated into the ESCP. While the project will aim at providing work opportunities for local workers, the ingress of migrant laborers during the construction phase will need analysis mainly as some works would need special capacities and the use of specialized technologies and equipment. ESIA will assess the extent of migrant laborers who will be employed for construction activities and the related E&S issues including providing accommodation facilities and arranging labor camps, licenses, and social security measures-related issues are likely to be encountered during implementation. The ESIA will also assess the risk to communities (eg: inconvenience, noise, disturbance, and pollution due to shifting utilities, arranging materials and labor, location of ventilation shafts, tunnels), pedestrian-vehicular conflicts and disturbance during construction, vibration and safety of structures (eg: Masani barrage, old buildings) and all other health and safety issues including traffic-related safety and diseases during all stages. TA and



Construction and Operations/Maintenance will be planned, designed (design-led solutions to community health and safety aspects are important), and implemented to comply with the World Bank Group’s Environment, Health, and Safety guidelines.

Though SEA/SH risk rating is Moderate and also the project proposes various design features such as well-lit stations, information booths, police security, and other feeder transportation, etc. to minimize and proactively address SEA/SH risks, ESIA will also identify GBV hotspots and risks, assess levels of community awareness, identify needs and modes to create awareness.

**ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

ESS5 is Relevant. Even though design features such as elevated and underground tracks and stations have helped to minimize impacts, it is estimated that the project shall: impact approximately 153 ha of land including 33 ha of private land (agricultural, residential and commercial); impact structures and involve physical and economic displacement of shops/street-side vendors, particularly at stations locations. There may be some adverse impacts due to the already undertaken, pre-construction/enabling works and these, if any, would be ascertained by the E&S Audit.

The borrower already has an RPF to address impacts arising from the ongoing ADB-funded corridor. Hence, under this project, the ESIA would review the current RPF and Resettlement Plan) review its implementation including the application of key provisions and propose measures to incorporate ESS 5 requirements and other recent national/state level provisions, if any. The updated RPF would form the basis to prepare Resettlement Action Plan (RAP) for the proposed corridor by appraisal.

Given that this project will be funded by both Bank and ADB, these documents -- RPF and RAP will be prepared to fulfill the requirements of both donors, will be consulted upon and disclosed before appraisal in-country and at the Bank portal. ESCP shall spell these out along with responsibilities and timelines.

**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

ESS 6 is relevant. It is expected that the developments will be along the existing highway. There are around 7 key biodiversity areas within 50 km of the alignment, though there are no Alliance for Zero Extinction sites. Risks and impacts on biodiversity and habitats, including ‘protected areas’, ‘critical habitats, natural habitats’, ‘modified habitats’, and/or ‘species with critical biodiversity value’ will be assessed as part of ESIA. Key water bodies in the impact zone include Yamuna river, Masani River (with barrage), and lakes (Eg: Sanjay Jheel). As many as 2000 (or more) trees may need to be felled for the proposed works. Due to the presence of wetlands and bird areas nearby (such as Basai wetlands, Okhla Sanctuary) Impacts on avifauna such as disturbance to the nesting of birds and due to catenary wires / electrical installations are a possibility. Forest areas at Sehravan, Aravalli Biodiversity Park (at the south-central Delhi ridge), and many parks, recreational areas, and zoological parks fall within the impact area of the corridor.



Following the ESS6 requirements, any potential adverse risks and impacts on biodiverse areas and living natural resources due to implementation works will be determined during the preparation stage. A critical habitat assessment will be conducted as part of the ESIA. ESIA will identify risks (cumulative impacts will be assessed as part of ESIA) on aquatic and terrestrial biodiversity areas and communities dependent on these and prepare either a standalone Biodiversity Management Plan (standalone BMP – if so determined by ESIA) or BMP as part of ESMP for managing/mitigating risks. The BMP, where relevant and applicable, will ensure no net loss on natural habitats and that a net gain will be achieved for critical habitats. By incorporating BMP conditions (which will be incorporated in bid documents), monitoring measures, and environmental guidelines for detailed design in areas near sensitive receptors/biodiversity/living natural resources, and sourcing of materials from these areas, the impacts/risks can be minimized, mitigated and managed.

BMP will include biodiversity measures to prevent risks and impacts on land, fauna, flora, and water bodies (including rivers, lakes, ponds, and life therein) due to (i) pre-construction activities / exploratory site assessments, (ii) runoff from material storage areas, (iii) depletion of tree cover, (iv) pollution from worksites including the deposition of fuel/wastes from construction sites, labor camps, fuel storage, vehicle maintenance areas during construction; and (v) flow of pollutants depots and stations, and O&M of facilities created, (vi) risks due to electrical installations. If the project impacts critical habitats, the BMP will include measures to achieve net gain. In case of need for tree felling, the permit will be sought from authorities as applicable in different States/ locations and compensatory afforestation will be ensured as in case of other BMP and monitoring measures, these will be included in BMP cost estimates. The project will explore alternate alignments/locations for support infrastructure to prevent the conversion of lands under sensitive wetlands, sacred groves, and designated parks. Supervising and monitoring arrangements for near sensitive areas will include the services of a biodiversity specialist.

### **ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

The preliminary assessment confirms the absence of any tribal groups across the locations of proposed corridor alignment, stations, depots, etc. The ESIA will validate the results of the preliminary assessment.

### **ESS8 Cultural Heritage**

ESS 8 is relevant. The project will avoid protected monuments. With 258 Centrally protected monuments and 20 State protected monuments in the NCR, and a multitude of religious properties, the presence of physical or cultural heritage in the country's rural and urban areas cannot be ruled out. The risks and impacts to cultural heritage include vibration and activities such as drilling, excavations, demolitions, causing a disturbance during TA assessments/studies, construction and O&M or other physical changes, including air or water pollution-related damage and risks to heritage structure, access restrictions to communities during works, etc. During ESIA, screening for potential cultural heritage features –protected assets and those non-protected but significant to the communities, possible impacts, and legal/other requirements will be undertaken with community consultations. Special focus will be given to the protection of tangible or intangible cultural heritage. During project preparation, such identified direct, indirect, and cumulative cultural heritage-related risks and impacts, and chance finds will be managed as per the national regulations and ESF; with the involvement of Heritage/Conservation experts. Mitigation measures or a Cultural Heritage Management Plan (CHMP) will be prepared as part of the ESMP. Procedures for



handling chance finds will be prepared as part of the ESIA and will be included in the ESMP and the Bidding Documents.

**ESS9 Financial Intermediaries**

Based on information available at this stage, the project is not expected to have financial intermediaries.

**B.3 Other Relevant Project Risks**

1. Overall, the risks are assessed as ‘high’ given the high risks and impacts of large-scale construction activities in congested areas and, possible land acquisition and other social risks, multi-agency engagements without/with moderate experience in managing projects following ESF, safeguards, GIIP and EHS.
2. Varying capacities of contractors on E&S management and adherence to regulations
3. The ongoing COVID-19 global pandemic presents a risk for the preparation and implementation of the project; mainly to visit and evaluate various sites in the pipeline and ongoing activities related to RRTS development owing to COVID 19 related travel restrictions. In addition, impacts/risks of labor availability and composition in case of another COVID spike are also additional risks.
4. The possibility of land speculation to take advantage of the improved infrastructure and related risks may be positive or negative for people and/or the environment. Besides there could be certain legacy E&S issues in the project area; proposed project activities could interfere with other already planned development interventions/government schemes in the area; stakeholders such as activists; any other conflict in the area, etc.

**C. Legal Operational Policies that Apply**

<b>OP 7.50 Projects on International Waterways</b>	No
<b>OP 7.60 Projects in Disputed Areas</b>	No

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?** Yes

**Financing Partners**

Asian Development Bank (ADB), Japan International Cooperation Agency (JICA) - JICA partnership will assessed during preparation and confirmed by appraisal.

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

The following actions are expected to be completed

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1. Documentation to meet requirements to meet all relevant ESSs including, RPF, LMP ESIA, ESMP, RAP, SEP, and ESCP, Guidance on Cultural Heritage, Biodiversity Management Plan (standalone, or as part of ESMP as determined by ESIA), guidance on environmental best practices including sustainable water recycling, reuse, and energy efficiency. ESMPs to include requirements on Labour and Working Conditions, Fire and Life Safety; and their approval and disclosure -- in-country and at the Bank's external website;
2. Setting up of project GRM including notification of GRC.
3. Terms of Reference for TA incorporating E&S requirements
4. Audit of current ongoing pre-construction activities to inform ESIA
5. Agreement on a Common approach with ADB/other financing partners

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

1. Augmentation of E&S unit at NCRTC based on the ESIA recommendations
2. Processes and timelines for obtaining requisite various regulatory clearances at local, state, and national levels for all project activities, and specific timelines for obtaining clearances for civil works, not obtained by appraisal
3. Implementation of SEP, LMP, etc.
4. Establishment of GRM and Labor GRM
5. Management of Contractors and ensure adherence to E&S conditions and ESMP throughout implementation, Operation, and maintenance
6. OHS Management Plan Provisions for worksite safety and labor management, including COVID 19 guidelines/protocols, Fire and Life Safety Plan
7. Processes and timelines for obtaining requisite statutory clearances at local, state, and national levels
8. Training and Capacity Building Plan of Project Officials, Contractors
9. Use of a Common approach with ADB/other financing partners

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**

16-Nov-2022

**IV. CONTACT POINTS**

**World Bank**

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**Borrower/Client/Recipient**

Borrower: Government of India

Public Disclosure



**Implementing Agency(ies)**

Implementing Agency: National Capital Region Transport Corporation

**V. FOR MORE INFORMATION CONTACT**

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**VI. APPROVAL**

Task Team Leader(s):	Tatiana Peralta Quiros, Bianca Bianchi Alves
Practice Manager (ENR/Social)	Christophe Crepin Recommended on 20-Apr-2022 at 06:48:45 GMT-04:00
Safeguards Advisor ESSA	Charles Ankisiba (SAESSA) Cleared on 21-Apr-2022 at 08:36:8 GMT-04:00