



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 27-Jun-2019 | Report No: PIDC26950



BASIC INFORMATION

A. Basic Project Data

Country Turkey	Project ID P170532	Parent Project ID (if any)	Project Name Improving Rail Connectivity in Turkey (P170532)
Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date Jan 06, 2020	Estimated Board Date Mar 20, 2020	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Treasury and Finance	Implementing Agency Ministry of Transport and Infrastructure	

Proposed Development Objective(s)

To increase rail freight traffic in main transport corridors and develop institutional capacity of Ministry of Transport and Infrastructure to build, maintain and operate branch lines and manage modern logistic centers.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	300.00
Total Financing	300.00
of which IBRD/IDA	300.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	300.00
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Environmental and Social Risk Classification
Substantial

Concept Review Decision
Track I-The review did authorize the preparation to continue



Other Decision (as needed)

B. Introduction and Context

Country Context

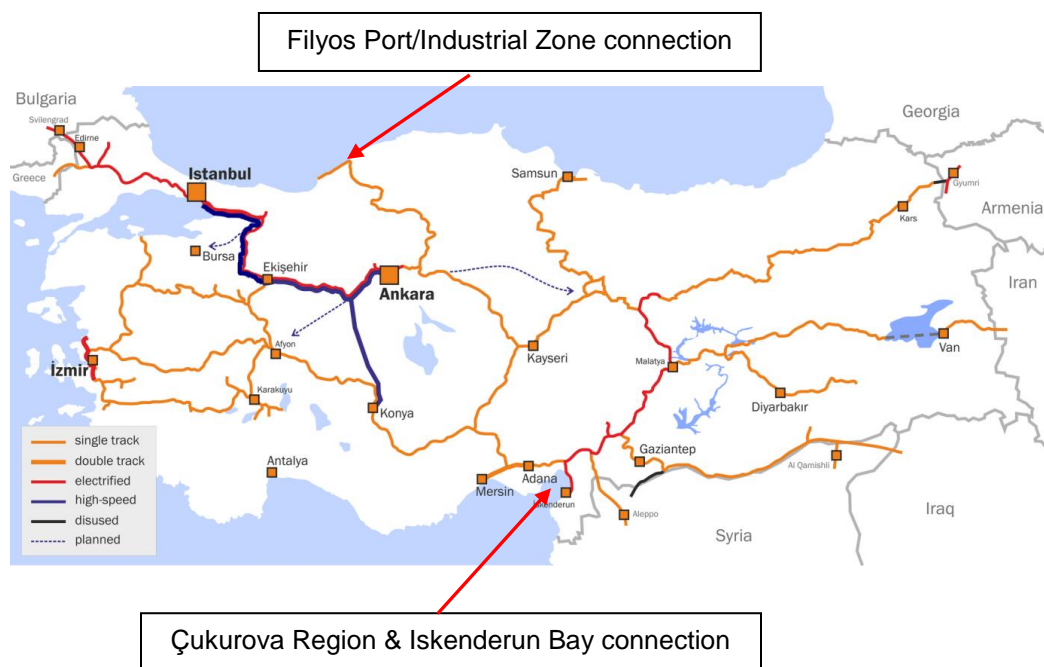
- 1. Turkey has achieved commendable economic and social development results since the early 2000s, raising it to the world's 17th largest economy and establishing it as a global presence.** Macroeconomic stability, broad social and economic reforms, closer economic ties with the European Union (EU), and a transformation of a significant part of the economy away from agriculture into manufacturing and services were core contributors to Turkey's growth. Turkey's Gross Domestic Product (GDP) per capita rose from US\$3,084 in 2001 to US\$9,445 in 2018; poverty incidence more than halved and extreme poverty fell even more dramatically. Turkey's growth for the 2010-2016 period continued to be impressive, averaging 6.7 percent annually, in sharp contrast to many other middle-income countries. Despite being hit by adverse shocks in 2016 linked to the failed coup attempt, the economy has shown notable resilience: growth in 2017 was at 7.4 percent, supported by a substantial fiscal stimulus. However, the economy has entered a challenging period in mid-2018 with output contracting, unemployment rising, and inflation at close to 20 percent. Tight monetary policy and the release of a New Economic Program in September 2018 provided some confidence to investors after a period of intense market volatility. But the economy remains vulnerable to market sentiments and the focus now is on implementation of critical reforms to sustain Turkey's development achievements.
- 2. Three quarters of Turkey's population is urbanized, over one third live in large urban centers with a population of more than one million. Turkey is strategically located close to major economic markets and on trade routes. In fact, Turkey has the lowest economic distance (measured as the distance to other countries, weighted by their GDP) of any developing country outside Europe, and Turkey has the second busiest land border in the world (with Bulgaria, an EU member state).**
- 3. Turkey's current Government was formed in July 2018, following national elections held in June 2018. In September 2018, the Government launched the National Economic Program (NEP) which sets out Turkey's macro-fiscal and structural reform strategy and is a comprehensive statement of the Government's policy intent for the near-term. The NEP is being implemented while the Government prepares for approval of Turkey's 11th Development Plan for the 2019-2023 period, which will set out the longer-term structural reforms to be pursued in order to address Turkey's development challenges.**
- 4. The NEP calls for emphasis on increasing domestic production and exports, and improvement of the logistics sector has become one of the core policies. The Government believes that further gains in transport and logistics efficiency will be needed to facilitate Turkey's national goals on trade competitiveness, economic growth, and productivity gains, and it has designated the railway sector as a primary pillar of this effort.**



Sectoral and Institutional Context

Background and Main Issues

5. **Turkey, owing to her advantageous geostrategic positioning between Europe and Asia, has a strong potential in becoming a major regional logistics hub.** Nevertheless, failure to develop the physical infrastructure of railways and maritime transport in a timely manner in response to the increased demand for transportation, inadequate institutional capacity and the current fact that highway transportation is the most efficient transportation mode for door-to-door transportation, have led to the intensification of freight and passenger transportation on the road network.
6. In the modal split of transport, highways dominate the sector with an 89% share in both freight and passenger transport. **Railways currently have a 3.9% share in freight**, and only 1% share in passenger transport (despite the significant investments in HSR), compared to the EU-28 shares of 17.4% in freight and 6.7% in passenger transport. Metal ore and mining products roughly make up 40% of rail freight in Turkey, with coke, petroleum and related products, coal, and gas accounting for an additional 22%. The annual rail freight volume in Turkey is about 26 million tons or 12 billion ton-kms, with average freight distance of 420 km -a market quite small for a country with such an economic size and location.
7. **The existing railway network in Turkey (see map below) is about 12,000 km in total, less than 18% of the highways network of 67,300 km.** In a country covering 800,000 sq-km, the rail network density is only about 13 km/1000 sq-km, compared to 51 km/1000 sq-km of the EU-28. In the railway network, high speed rail (HSR) lines constitute 600 km and 9.000 km are conventional main-lines, with the remaining 2.400 secondary lines and station connections. Only 37% of the network is electrified and 44% is signalized. Major industrial centers such as Bursa, and port cities such as Antalya and Trabzon do not have railway access. As a result, railway network is suffering from lack of accessibility with regard to rail freight logistics.





8. **Transport sector has been the focus of the public investments for the last two decades**, with transport sector investments allocated a share of about 30% amongst the total. Analysis of the current Public Annual Investment Program (2019) indicates that this trend is maintained, with the transport sector allocated a total of TRY 20.3 billion out of TRY 65.4 billion of overall central budget investments (31% share).
9. Within the last decade only, despite the fact that over a total of TRY200 billion (about \$50 billion) has been spent on the roads, as the road freight traffic increased from 177 billion ton-km to 262 billion ton-km during the same period (an increase of 48%), supply of road capacity inevitably could not catch up with the traffic, thereby decreasing the performance and safety.
10. As a result, **Turkey's global standing in logistics performance has steadily deteriorated over the past six years**, signaling an urgent need to attain further improvements and reverse this negative trend. As early as 2012, Turkey was ranked as the 27th best-performing economy in international logistics by the Logistics Performance Index (LPI), a position that has steadily weakened since—to 30th in 2014, 34th in 2016, and 47th today. Much of this deterioration stems from relative under-performance in infrastructure provision and small market scale as well as the quality of logistics services, particularly in the railways.
11. Improvements in containerized rail intermodal and other forms of rail-based logistics are expected to boost economic dynamism and support job creation in Turkey. By enhancing access to domestic and international markets through improved connectivity, railway infrastructure investments are recognized as direct drivers of rail adoption and indirect drivers of sustainable economic growth.
12. Rail freight currently carries limited commodities including metal ore, coal and petrochemical products. Increase in rail freight volume through better industry/port connections will also contribute to modal shift for a wider and more value-added spectrum of commodities in Turkey.

Institutional Structure

13. **DG Infrastructure Investments within the Ministry of Transport and Infrastructure (MoTI), through article 485 of the Presidential Decree No.1 dated July 10, 2018, has been authorized to be responsible for design and construction of public railways, logistics centers, ports, airports, as well as construction and operation of rail and road connections to major ports, airports, industrial facilities, organized industrial zones, mining areas.** Therefore, DG Infrastructure Investments will be the main Client in this project.
14. DG Railway Regulation within the same ministry, set up in 2016, is responsible for ensuring a free, fair and sustainable competition environment within the sector, licensing the public and private rail operators, determining the procedures and principles regarding public service obligation (PSO), as well as rights, obligations and responsibilities of the service producers.
15. The State Railways of Turkey (TCDD), is a government-owned national railway company responsible with the ownership and maintenance of railway infrastructure in Turkey, as well as



the planning and construction of new HSR lines. TCDD owns and maintains all public railways in Turkey, including stations, certain ports, bridges and tunnels, yards and maintenance facilities. Prior to 2017, TCDD also operated all railways in Turkey. However, following market liberalization, TCDD was unbundled with TCDD Transport formed in 2016 to take over the railway operations.

Rail Freight Investments

16. **The agenda towards greater railway efficiency in Turkey is supported by high-level legislation and adopted policy.** Turkey's 10th Development Plan (2014-18) and subsequent medium-term plans have focused on promoting multimodal transport by building railway branch lines to freight centers, factories, industry zones, and ports with multimodal cargo capture potential. Similarly, the new Law on "Development of Industry and Supporting Production" (2017) states that "the railway and road connections of the Organized Industrial Parks will be provided by the Ministry of Transportation and Infrastructure [MoTI]".
17. **The Development Plan targets the goal of making Turkey the preferred regional logistics hub linking Asia and Europe by 2023, through significantly increasing the modal share of rail freight in transport from the current low base of 3.9% to 15% by 2023, in part through improvements in last mile connectivity as well as parallel improvements in the market responsiveness of multimodal logistics service delivery will also be necessary.** The concept of last mile connectivity, by definition, blends these two elements of infrastructure provision and service delivery. As such, expanding the last mile connectivity between major production centers and the core national railway network is a well-justified priority component of Turkey's railway sector development agenda.
18. TRY 7.5 billion (app. \$1.5 billion) has been allocated in 2019 for the public railway sector investments – a 37% share in the transport sector. Despite this, TRY 97 billion (App. \$16 billion) still needs to be allocated to the current public railway project stock (mainly High-Speed Rail projects under progress), with the current annual investment ceiling, 13 years will be needed to complete the ongoing projects.
19. As Turkey has focused extensively on construction of High-Speed Rail (HSR) projects within the last decade, railways investment budget was channeled towards HSR projects (approximately 75%). Keeping in mind rehabilitation and supervision services (another 12%), **the sector had a limited scope for freight rail improvements (approximately TRY 1 billion or less than \$170 million for 2019), indicating the presence of a funding deficit regarding rail freight investments.**

Railway Reform in Turkey and Existing Challenges

20. Within the last decade, a series of reforms have been made or are currently being implemented. The most visible component of railway sector reform in Turkey is the vertical separation of TCDD—a formerly vertically-integrated public railway monopoly—pursuant to the 2013 Law on Liberalization of the Railway Transport Sector in Turkey, and the supplementary secondary



legislation enacted until 2017. As of June 2016, TCDD was reorganized as a state-owned holding company, comprised of TCDD as the nation's rail infrastructure manager, and its subsidiary TCDD Transport as a passenger and freight railway undertaking.

21. Restructuring of TCDD enables competition in the provision of rail services by establishing an independent infrastructure manager responsible for granting access to the national rail network on a non-discriminatory basis to TCDD Transport and any other (properly licensed, privately-owned) operators who wish and are granted entry to the market.
22. In Fall 2017, two private companies (Omsan and Korfez Lojistik) have been certified as the first private rail freight operators of Turkey. Thus, the railway reform has started attaining its targets, albeit with delays and more work remains to be done.
23. The adoption of railway reform has brought about critical sectoral improvements, but operational and institutional challenges remain deep. Railway reform has introduced (a) committed public funds in support of infrastructure investment, and (b) a transparent, viable, and increasingly tested regulatory framework for private sector involvement—and investment—in rail freight service delivery. However, infrastructure gaps such as sidings to connect the last mile of delivery, operational disruptions and line closures, expected to continue through the medium term, hamper operational performance and reduce the modal attractiveness of rail vis-à-vis the dominant roads sector.
24. In addition, a lack of clarity as to the role of the Directorate General of Railway Regulation (DGRR) in investment planning, the evolving nature of the relationship between TCCD Infrastructure and TCDD Transport, restrictions around the use of rolling stock, and changes in the market position of TCDD Transport are all barriers to increased private sector involvement.
25. TCDD is also constructing 21 logistics centers in Turkey. Of these, 9 centers have been completed and are currently under operation, with construction works under progress for another 5 centers, with the remaining 7 centers are at design, land acquisition and procurement stages. Recently completed rail logistics centers in Turkey have targeted attaining high quality logistic operations. Nevertheless, at current they have attracted limited interest of the private sector and mostly remain underutilized despite the fact that more than \$200 million has been spent so far, **mainly due to underinvested railway connections, choices of location for logistics centers and absence of an effective sectoral policy incorporating both private/public sector as well as operational efficiency and management issues.** The government has initiated a Logistics Master Plan to address these issues, but so far has been unable to develop sound policies or a working operation model for these centers.



Two Main LMCs



LMCs to be designed

▲ Logistics Centers

Relationship to CPF

26. The Bank's prior engagement in transport sector in Turkey within the last decade focused on transformation of the railways sector from a state monopoly into a liberalized, functioning market-oriented structure which is positively contributing to Turkey's economic development.
27. The Railways Restructuring Project (P077328), involving a \$136.7 million bank loan, was implemented during 2005-13. The project aimed to improve the effectiveness of railway operations on the Mersin-Toprakkale and Yenice-Bogazkopru lines by increasing capacity and improving service quality and laying the groundwork for restructuring TCDD by developing experience with financially viable contract arrangements for loss making public services and access pricing of infrastructure.
28. The latest two DPOs in Turkey included certain important milestones regarding rail sector liberalization. DPO on Sustaining Economic Growth, SSG-DPL-I, \$367.4 million, under Pillar C-Deepening Turkey's Infrastructure Reforms, had four prior actions/triggers regarding railways. These were designed around supporting changes to the legal framework for railways to open access to the Turkish railway infrastructure, and creation a rail infrastructure company that can provide non-discriminatory access to all train operators.



29. The other DPO (Resilience, Inclusion and Growth, RIG-DPF, \$400 million), under Pillar C- Addressing Structural Bottlenecks to Sustainable Growth, had its prior action No.8 on railways reform, with an expected result that by 2018, a contract was signed between at least one new operator and TCDD infrastructure manager including the rights of access and the access charge levels for using the infrastructure – achieved in early 2017, one year before the deadline.
30. The proposed project is consistent with the ongoing World Bank Country Partnership Framework (CPF) for Turkey (FY18-FY21) (R2017-0194 [IFC/R2017-0239, MIGA/R2017-0060]) which builds on three pillars; (i) growth, (ii) inclusion, and (iii) sustainability. The proposed Project supports the sustainability pillar as articulated by CPF Objective 9-Increased sustainability of infrastructure assets and natural capital. The CPF made reference to the EU IPA-II funded TA which was identified as a possible engagement leading to financing opportunities in the transport sector. Promoting intermodality and increasing rail freight market share is a major component of the EU IPAII TA.
- 31. This proposed lending is a natural continuation of the recently completed ASA on Last Mile Connectivity (LMC)/Options to Improve Freight Rail Logistics in Turkey (P165757). The ASA focused on analysis of Turkey’s LMC challenge in the context of national goals and aspirations, domestic and international experience, market requirements, and physical connectivity gaps across the national rail freight network. Through this TA and close cooperation with the Client, the Bank team customized a strategic rail last mile connection lines prioritization assessment tool and conducted a preliminary analysis on providing an enabling environment for private sector participation. This proposed lending was developed through the application of the assessment tool and supplemented with enhanced operational efficiency for logistic centers.**

C. Proposed Development Objective(s)

To increase rail freight traffic in main transport corridors and develop institutional capacity of Ministry of Transport and Infrastructure to build, maintain and operate branch lines and manage modern logistic centers.

Key Results (From PCN)

32. Achievement of the PDO will be evaluated using the following indicators:
- (i) increased freight transport carried by railways,
 - (ii) decrease in GHG emissions resulting from land-based freight transport,
 - (iii) enhanced operational efficiency and management for logistics centers, strengthening of the MoTI’s intermodal regulatory framework

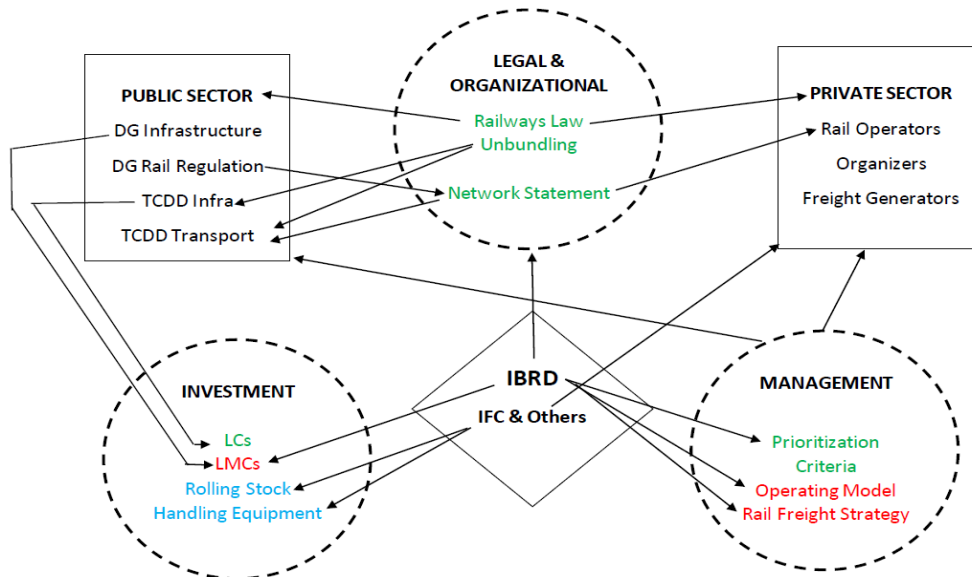
D. Concept Description

33. The proposed project aims to increase rail freight efficiency in Turkey by improving last-mile connectivity, enhancing the operational efficiency of logistics centers and strengthening institutional capacity. The project is developed around three main components:



- Component I – Construction of two strategic railway branch lines. This component includes two main branching lines, Çukurova Region & Iskenderun Bay railway connection & Filyos Port/Industrial Zone connections, as well as 2-3 more projects to be selected from the list of 10 potential LMCs, applying the prioritization methodology developed through the recently completed ASA.
- Component III – Design & Consultancy. This component includes survey, design & feasibility studies for the 10 potential LMCs identified by the Ministry as well as supervision of the construction works under Component I.
- Component III – Institutional Capacity Building. This component is a natural continuation of the ongoing EU IPAll funded TA on promoting intermodality and rail modal share which is the top priority of the Ministry and national government. The Government has invested heavily on construction logistic centers but the impact on modal share is small, mainly due to underinvested railway connections, choices of location for logistics centers and absence of an effective regulatory mechanism for modernizing and improving the operating efficiency of logistics centers as well as attracting private sectors.

This component therefore will include the following activities: 1) establishment of the Project Implementation Unit; 2) institutional capacity building for the MoTI to strategically build, maintain and operate branch lines; 3) further assessment of the regulatory environment for rail logistics and the operating efficiency of logistics centers; 4) introduction of best practices to strengthen MoTI's capacity for regulating and modernizing logistic centers and creating enabling environment for private sector participation, which will contribute to the efforts in increasing the modal share of rail in Turkish freight market.



34. Items marked in green indicate previous IBRD engagement areas while the red items are envisaged to be covered in this project. Blue items indicate potential involvement areas of a future IFC operation.



Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

The project involves limited and foreseeable environmental and social impacts. The 2 projects (Cukurova and Filyos railway connections) will require preparation of partial environmental and social assessments and land acquisition plans. The feasibility and design studies will also be subject to environmental and social standards and the TORs to be prepared will include provisions on that. During project implementation, 2-3 LMC projects will be selected among the completed feasibilities and their construction works will be financed by the project. Preparation of environmental and social documents of these projects will start after appraisal and after feasibility studies are advanced and projects are selected.

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

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APPROVAL

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