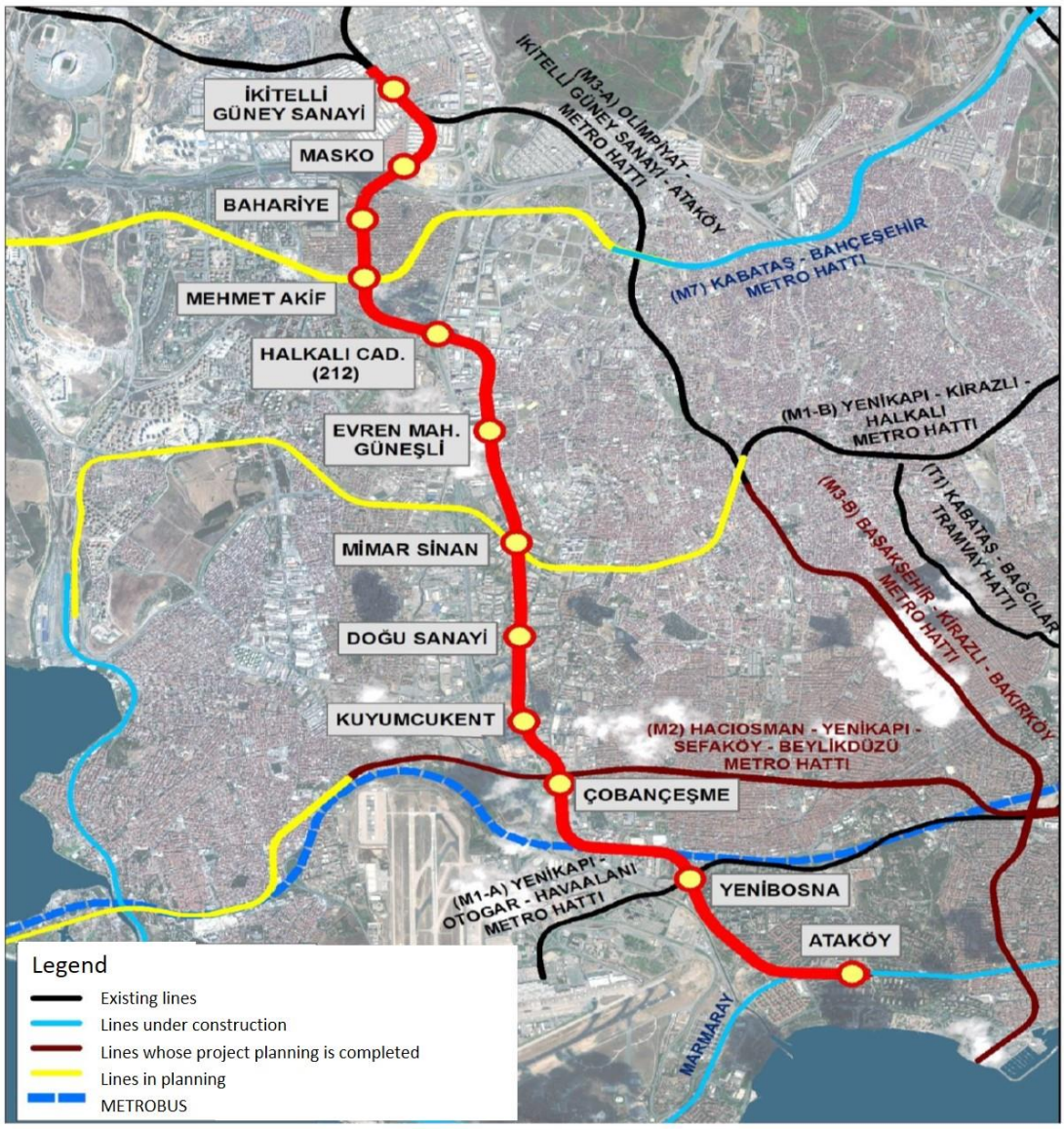
Istanbul Metropolitan Municipality Ataköy - İkitelli Metro Line Project - Non-Technical Summary (NTS)

1. What is the Ataköy – İkitelli Metro Line Project?

The Ataköy - İkitelli Metro Line Project (Project) being built by IMM and to be operated by MI covers the construction and operation of a 13.4 kilometres length underground metro line including twelve (12) underground stations and operation control center and workshop area as well as electromechanical works of the entire line. The Atakoy - Ikitelli Metro Line (Line) will connect districts in the western side of Istanbul from North to South. The Line will provide connectivity between Marmaray, Basaksehir - Kirazli, Aksaray Airport metro lines as well as Metrobus bus rapid transit line, which all connect districts of the European part of Istanbul from east to west. Figure below shows all connections along the 13.4 km metro line with the existing metro line operations.



Atakoy-Ikitelli Metro Line Route and Station Locations

The Project will enable commuters to travel from Atakoy to Ikitelli in 19 minutes, a journey which currently takes around 50 minutes by private car. It is expected to

significantly reduce high traffic congestion, air and noise pollution as well as carbon emissions and result in safer and more reliable transport services for an estimated 400,000 passengers per day on the line.

Twelve underground stations are proposed for the Atakoy - Ikitelli Metro Line (see table below). Each station will include the following basic elements: center platforms with a length of 90 m and minimum width of 14 m, a minimum of one access stairs to each platform and one emergency exit (additional access based on passenger volumes) and provisions for auxiliary rooms at concourse level.

List of Stations

Stations	Km	Distance (m)
İkitelli Sanayi (Mevcut M3 İstasyonu)	0-113	0
Masko	0+856	969
Bahariye	1+666	810
Mehmet Akif	2+343	677
Halkalı Caddesi	3+441	1098
Hoca Ahmet Yesevi	4+847	1406
Mimar Sinan	6+210	1363
Doğu Sanayi	7+290	1080
Kuyumcukent	8+293	1003
Çobançeşme	9+117	824
Yenibosna	11+040	1923
Ataköy	13+221	2181

IMM launched the tender for the Project in July 2015 to select the construction contractor company. The tender process was completed and contract with the contractor was signed on 2nd February 2016. A supervising engineering company was also appointed by IMM on 8th April 2016 to control/supervise the work of the construction contractor company.

Total duration of planning and construction of the Project is estimated as 38 months. Construction process started in March 2016 and is presently ongoing at eight locations. After completion of the construction of the Project, the system will be commissioned and placed in service for public use.The 2019 capacity requirement for the metro line, based on the projected long-term ridership growth is expected to be 20,000 passengers/hour-direction. Initial fleet will consist of 72 vehicles (year 2019).

2. Parties of the Project:

a) **Construction Phase:**

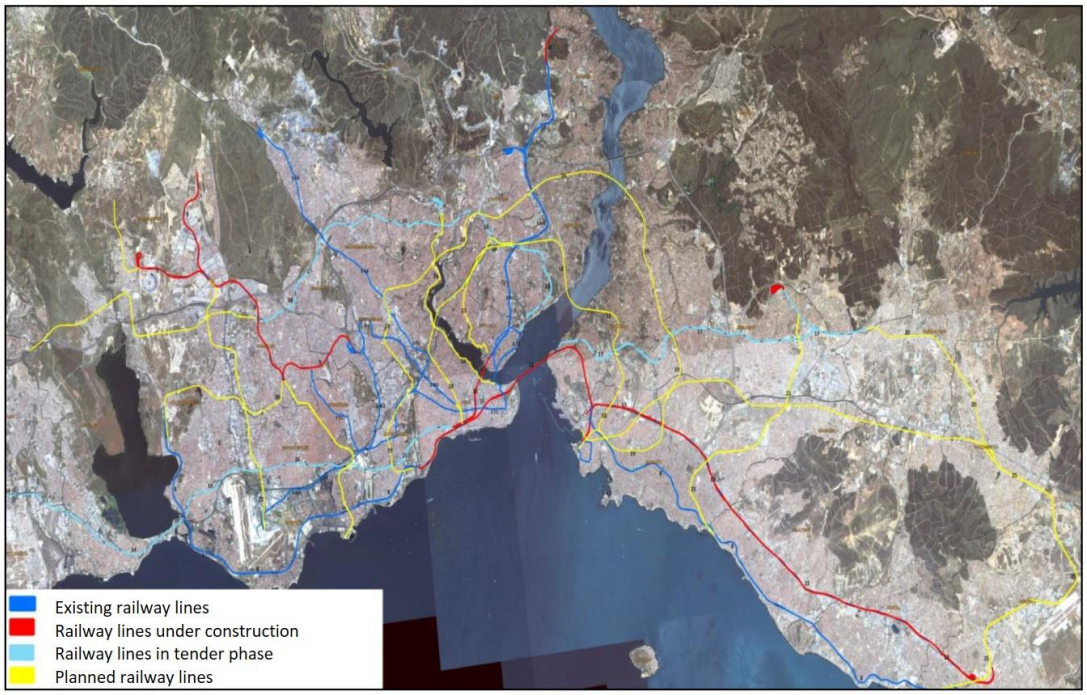
- **İstanbul Metropolitan Municipality Directorate of Light Rail Systems:** Metro lines which are contracted by İstanbul Metropolitan Municipality Directorate of Light Rail Systems are transferred to MI to be operated upon the completion of construction.

- **Main Contractor:** Aga Enerji A.Ş. responsible for construction and preparation of metro line operation

b) Operation Phase:

Who is Metro Istanbul A.S. (Atakoy-Ikitelli Metro Line Operating Company)?

Metro Istanbul A.S. (MI) is the municipal enterprise of Istanbul Metropolitan Municipality (IMM) which operates the tramway, metro, light rail, funicular and aerial cable cars in the City. Metro Istanbul A.S. was established in 1988 and currently operates urban railway lines of 145 km and serves more than two million passengers every day. The rolling stock fleet, which is about 11 years old at average, consists of 650 vehicles in total. The extent of the railway lines presently operating and future expansion plans is given in below figure.



Existing and Planned Railway Lines

MI provides maintenance services for rail lines and auxiliary facilities with different technologies. MI carries out the periodic, corrective maintenance and overhauling of its fleet (each metro, light metro and tram cars run approximately 100,000 km per year). Rolling stock maintenance activities of MI could be listed as follows: Preventive maintenance activities, corrective maintenance activities, renewal and revision activities, repair activities for damaged rolling stock, modification projects, wheel turning and replacement activities, vehicle rescue activities, repair and maintenance of workshop equipment and repair of electronic cards. MI is responsible for upkeeping of the electrical and electronic facilities of its metro, light metro, tramway, funicular and aerial cable lines in operation. MI's services also include operations planning, traffic management, station services and Operational Control Center (OCC) management.

3. What environmental and social studies have been undertaken within the scope of the Project?

In accordance with the Environmental Impact Assessment Regulation (Official Gazette Date/Number: 25.11.2014/29186), an 'EIA not Required' decision was issued for the Project on 19.03.2015. IMM has approached European Bank for Reconstruction and Development

(EBRD) for the funding of the Project. In relation to this, an Environmental and Social Assessment (ESA) was conducted by ACE Consulting and Engineering Inc. The objective of the ESA was to identify and assess the potentially significant existing and future adverse environmental and social impacts associated with the Project.

The Project has been designated as a category B project in accordance with EBRD's 2014 Environmental and Social Policy; this categorisation is based on the anticipation that the potential environmental and social impacts/risks will be limited, generally site specific and can be avoided or mitigated by adhering to effective preventive plans. The environmental and social impacts of the Project were tried to be prevented or mitigated by means of appropriate design in the beginning; for example at the design stage, use of privately owned lands was avoided as far as possible, thus the need for physical resettlement was eliminated and adverse impacts on land owners were minimized during the design stage. Additionally, during the construction phase the tunnel boring machine (TBM) technique resulting in less impact compared to other techniques will be used. With the use of covered tunnel boring technique the adverse impact of the Project on the environment and on people has been minimized. Furthermore by adhering to EBRD's relevant environmental and social performance requirements, national laws and regulations as well as guidelines or design criteria, these risks and impacts are also anticipated to be minimised.

4. What is the purpose of this document?

This Non-Technical Summary (NTS) document provides an overview of the proposed Project and presents a summary of relevant potential environmental and social issues and impacts related to the Project. Appropriate measures to mitigate key adverse environmental and social impacts that may arise in relation to the Project are also provided.

5. Scope of Environmental and Social Assessment (ESA) work

The scope of ESA work comprised the following:

- Environmental and Social Audit of the corporate environmental and social management system and human resources (HR) practices implemented by the Project owner for existing operations;
- Analysis of potential environmental and social issues associated with the Project

The scope of the ESA undertaken for the Project included an environmental and social audit through a site visit to selected existing facilities and construction sites, interviews with relevant staff, review of available environmental and social documents and an environmental and social management review and analysis for the Project in relation to national regulatory requirements and relevant international standards. As part of the ESA, a detailed ESA Report, an Environmental and Social Action Plan and a Stakeholder Engagement Plan were prepared for the Project.

6. What are the key environmental and social impacts of the Project and what are the proposed mitigation measures?

The main improvement that will be provided by the Project will be the decrease in the number of vehicles in traffic and consequent reduction in emissions, the increase in travel safety and the decrease in the amount of time allocated to traffic by passengers. Potential

positive impacts will also include job creation and employment opportunities for those who will be employed by the Project, either in the construction or operation and increased economic activities directly or indirectly related to the Project. On the other hand, in addition to its benefits, the Project could potentially result in some negative impacts on the environment and people, if not managed carefully. In addition, the ESA determined areas for improvement related to the existing construction and operation activities. Therefore, IMM, the construction contractor company and supervising engineering company will be implementing certain actions (called "mitigation measures") to prevent, reduce, or mitigate any potential negative impacts of the Project, including the existing operations.

A summary of key potential impacts and mitigation measures that have been identified is provided in the Table below.

Overview of key potential Project impacts and their mitigation

No	Issue	ES Risks/Benefits	Mitigation measures
1	Environmental, Health and Safety (EHS) management systems / Environmental and social management plan	Optimization of environmental and social management through a formalized system	• Develop an environmental and health and safety management system for construction contractor company in line with the requirements of ISO 14001 and OHSAS 18001 standard • Establish a strong HSE team within the construction contractor company including an experienced Environmental Manager and a Health and Safety Manager with clearly defined roles and responsibilities, and authority • Resource IMM and supervising engineering company to monitor the implementation of EHS and social requirements by the construction contractor company • Prepare and implement an environmental and social management plan and supporting plans to be implemented during the construction activities.
2	EHS monitoring	Compliance with EBRD's environmental and social policy Turkish regulations / aligning impact assessment to acceptable standards	• Construction contractor company to undertake air emissions monitoring at the construction sites of large excavation activities and excavated material transport and to identify and implement mitigation measures as appropriate • Construction contractor company to undertake noise monitoring at the construction sites and to identify and implement mitigation measures as appropriate • IMM to develop and implement an environmental monitoring programme covering: o identification of air emission sources and air emissions monitoring at identified sources o Noise monitoring along the Atakoy-Ikitelli Metro Line and to identify and implement mitigation measures as appropriate • IMM to develop and implement a Contractor Management System • Construction contractor company to improve Subcontractor (non-employee) oversight system
3	Traffic management	Management of traffic impacts and risks / aligning impact assessment to acceptable standards	• IMM to conduct a third-party review of the traffic circulation around Atakoy-Ikitelli Metro Line Stations before the construction of the stations to ensure optimum traffic routing and accordingly • Construction contractor company to develop and implement a robust traffic management plan for the

No	Issue	ES Risks/Benefits	Mitigation measures
			construction sites.
4	Labor and working conditions / management of employee grievances	Improved labor and working conditions Improved employee/ contractor relationship and management Improved grievance management	• Construction contractor company to develop an HR Policy and a Personnel Regulation Procedure which defines key employee rights in line with national laws and EBRD PR2 requirements and to assign an HR team to the project • Construction contractor company to develop and maintain employee records/documentation of its own workers and its sub-contractors in line with the legislation • Construction contractor company to conduct an internal labour audit every quarter at each site during construction • Construction contractor company to improve dormitory conditions • Construction contractor company to establish and implement a "formal employee grievance mechanism" for all direct and sub-contracted employees and provide them information on channels for internal communication and raising grievances.
5	Permitting	Compliance with national regulations	• IMM to clarify during the construction the required permits for OCC-Workshop and Maintenance facilities with MoEU and obtain any necessary permits • IM and construction contractor company to clarify whether any project sites fall within the Regulation on Soil Pollution Control and Point-Source Contaminated Sites (RSPC) and to fill out the Activity Preliminary Information Sheet as per the RSPC, if required
6	Waste management	Waste management control Compliance with national regulations	• Construction contractor company to revise the permit for the disposal of excavated material • Construction contractor company to ensure that the wastes are stored at the construction sites in accordance with the regulations, waste records and disposal records are kept. • MI to ensure that hazardous wastes generated at MI Atakoy-Ikitelli Metro Line storage facilities are transported directly with licensed waste haulers to licensed disposal facilities directly
7	Occupational health and safety (OHS) practices	Increased health and safety performance in the workplace	• Construction contractor company to enhance the existing OHS practices to guide all activities during construction. During the operation phase MI and during the construction phase IMM and the Supervising Engineering Company (Control, Engineering and Consultancy Services for İkitelli-Ataköy Metro Line Construction and Electromechanical works) to develop a contractor monitoring programme to increase their oversight of construction contractor company activities and to keep relevant records in terms of health and safety implementation • Contractor company to take necessary actions for protection of the health of employees working on construction site • Contractor company to obtain accreditation approval for the design capacity of the personnel carriers, the design of crane foundation and the machinery's hook design of the construction contractor
8	Community health and safety / Emergency	Protection of community health and safety	• Construction contractor company to develop road safety policy, practices and procedures to include a defensive, anti-rollover and antiskid driving training program for own

No	Issue	ES Risks/Benefits	Mitigation measures
	cases		drivers and concrete mixer supplier drivers. • Construction contractor company to monitor and analyze public accidents and incidents related to construction activities. • Road signs for rerouting in Çobançeşme to be clearly placed by IMM/Contractor Company and Cobancesme roundabout to be improved for better traffic flow. • Contractor Company to revise emergency response plan to include 3rd party incidents, landslide, tunnel collapses and groundwater inflow with more detail • Contractor Company to appoint a suitably qualified professional to conduct a complete life and fire safety review of the Project components.
9	Potential land acquisition	Maintain effective relations with landowners	• IMM to complete acquiring private lands voluntarily without triggering expropriation process • In cases when an expropriation process is triggered, IMM to prepare a Land Acquisition and Livelihood Restoration Plan that sets forth Project's land acquisition principles, legal framework, and defines monitoring and evaluation processes.
10	Stakeholder engagement	Maintaining good relationships with stakeholders	• IMM/Contractor Company to implement the Stakeholder Engagement Plan (SEP) in order to ensure effective communication with the stakeholders through publications and corporate websites. • Construction contractor company to develop and implement a Formal Grievance Mechanism specific to the construction activities. • IMM / Supervising Engineering Company to review regularly the grievances submitted to construction contractor company in order to ensure that all grievances are resolved timely and effectively.

7. What is IM's approach to stakeholder engagement?

Both IMM and MI have mechanisms for stakeholder engagement, information disclosure and grievance management. IMM has established a strong community/public relations team and a 24-hour call center (Alo 153) to manage the grievances on all municipal projects and services, including construction and operation of metro lines.

The Project has been communicated to various stakeholders and affected communities through the IMM website, billboards, media advertisements and face-to-face interviews. Within scope of the stakeholder engagement process, an information disclosure study was undertaken first on 18-19 August 2016 and then on 29-30 November 2016 regarding the temporary road closures and traffic diversions during the construction activities in Cobancesme and on Mimar Sinan Avenue and its vicinity, respectively. During the study which was limited to the Cobancesme neighbourhood (approximately 9,600 people) and Mimar Sinan Avenue (4.000 people) residents, visits to homes and businesses were conducted and a total of 6,200 brochures were distributed. All interviews were recorded and survey outcomes were documented by IMM Public Relations department. IMM will continue to undertake similar community consultation meetings in all affected communities throughout the construction of the Atakoy Ikitelli Metro Line.

8. How will IM communicate and engage with stakeholders?

A Stakeholder Engagement Plan is developed for the Project to ensure that there is regular ongoing engagement with the local community and businesses, passengers, local government and organisations, to inform them of plans and developments on an ongoing basis and gather any complaints or feedback. The Stakeholder Engagement Plan is disclosed at the website: www.istanbulunmetrosu.com.

9. How can stakeholders make a complaint or an inquiry?

IMM manages public grievances and comments through its grievance evaluation and resolution procedure. Received through various channels, the grievances/comments are collected into a single and centralized system and handled/finalized by the public relations division. The following channels are available for those who wish to convey a comment or grievance to the Company:

- Call Center 153 (Alo 153)
- Short Message Service 1530
- Email (beyazmasa.ibb.gov.tr)
- Official website of IMM (http://beyazmasa.ibb.gov.tr/)
- Help desks of IMM (i.e. Beyaz Masa 'White Desk') deployed at certain locations
- Facebook (@ibbbeyazmasa)
- Twitter (@ibbbeyazmasa)
- 'ibbBeyazMasa' application specially developed for smart phones
- Complaint and request boxes in the stations

Contact details are provided below for the construction phase of the Metro Line for submitting grievances to Istanbul Metropolitan Municipality:

Istanbul Metropolitan Municipality

Public Relations Directorate

Kemalpasa Mahallesi Sehzadebasi Caddesi No:25 Fatih / Istanbul

E-mail: halklailiskiler@ibb.gov.tr

Tel: 0 (212)455 17 35

Tel: 153

Fax: 0 (212)455 26 32

Website: https://halklailiskiler.ibb.gov.tr/ or **http://beyazmasa.ibb.gov.tr/**

Contact details are provided below for the construction phase or about the operations for submitting grievances to the relevant department of Metro Istanbul A.S:

Metro İstanbul A.S.

Yavuz Selim Mahallesi Metro Sokak No: 3 Esenler / Istanbul

E-mail: info@metro.istanbul

Tel: 0 (212) 568 99 70

Tel : 153

Fax: 0 (212)568 89 00

Website: http://www.metro.istanbul/