Baghdad Metro Project


Introduction

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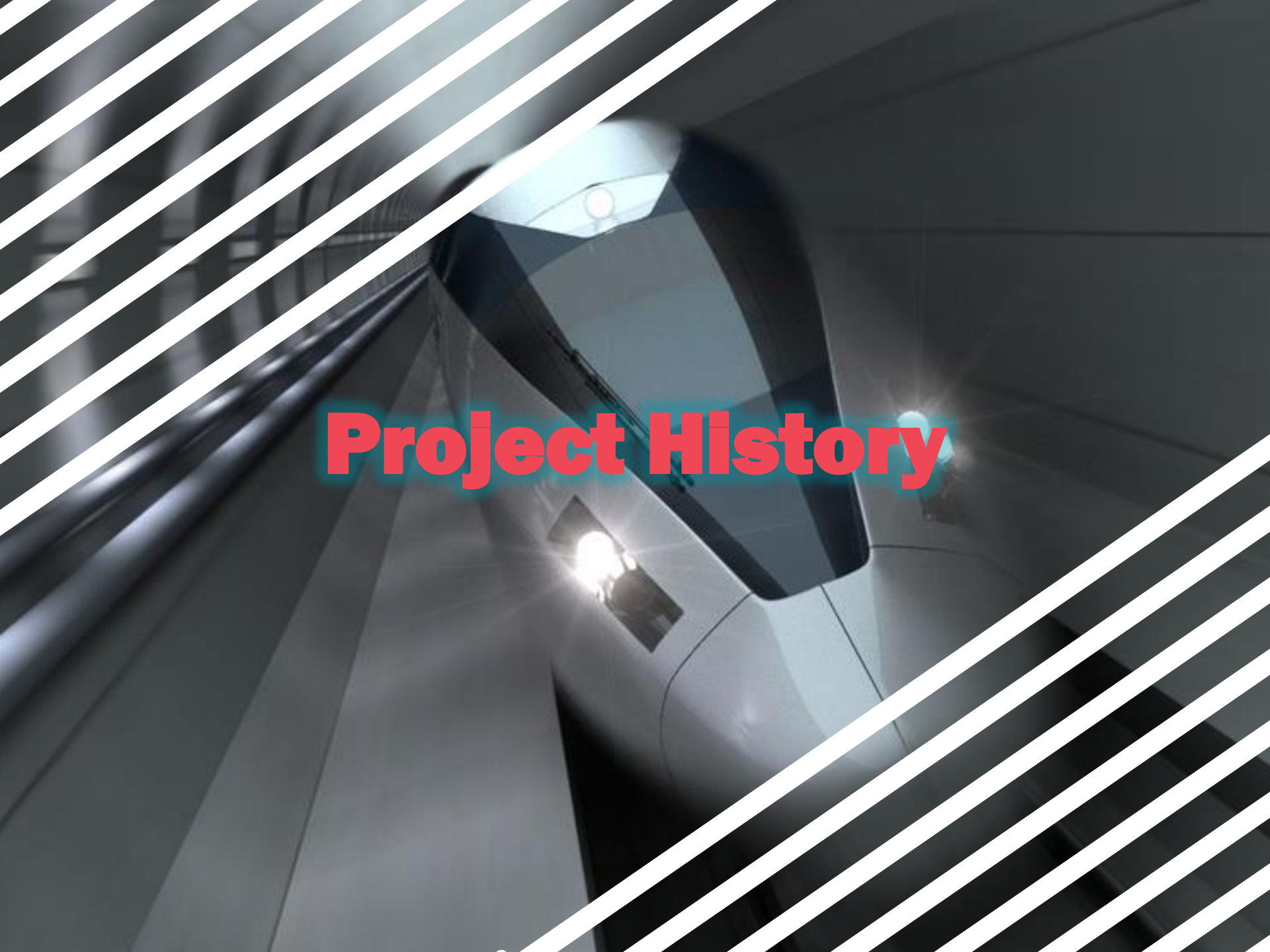
- The transport sector is considered one of the most important sectors of the comprehensive urban development in large cities and is seen as an integral part of the urban planning process as a whole because it is closely related to urban development and landuse. Therefore, upgrading the transport sector is one of the most important indicators of urban development. In addition to its impact directly or indirectly in the social life of individuals through the process of communication and change in social and cultural behavior to them.
- In fact, the city of Baghdad exceeded the threshold of two million people in the mid-seventies and the presence of a significant increase in the times of the trip and cost to the residents despite the efficiency of the use of public transport by buses in a timely manner, but the need to adopt another method of public transport, especially after the adoption of the basic design of the city of Baghdad Prepared by Paul Service and approved in 1973.
- For these reasons, the relevant authorities have been concerned with public transport studies in Baghdad since the mid-1970s, including the study of the Baghdad metro project. All public transport modes (metro, train, bus) are necessary for a city the size of Baghdad, (7.5 million) and is expected to reach 11.4 million in 2030.


Project History

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- On 10 December 1975, the Ministry of Transport entrusted the preparation of detailed studies of a rapid transit system in Baghdad to a Swiss-German joint venture, Swissconsult-Deconsult, under the supervision of Electro Watt Engineering Services in Zurich, Switzerland at request of the Planning Council on October 26, 1974 for the purpose of serving the City of Baghdad with the Rapid Transit System, as well as connecting it to the external network (connecting it with the rapid transit network of the governorates and neighboring countries).
- This study specialized in transportation at the time was based on the comprehensive development outcomes of the year 1973 of land uses, population densities and target year 2000. The study area included a larger area than the administrative boundaries of Baghdad city, where the study area was set at a radius of 100 km to 120 km from the center of Baghdad.
- In 1980, the Ministry of Transport contracted with the same company that prepared the study entitled Modified Studies and Preliminary Design 1980. The final study outputs included the recommendation of the tracks to be adopted and the initial design of these tracks after studying a number of variables, The opinion of the Iraqi side, under which the adoption of the system was designed and implemented to be its tracks and stations entirely underground.

Project History

- On August 14, 1979, a contract was signed between the Ministry of Planning, Scott Wilson, Kirbatrik and their partners for engineering and consultancy services to carry out a comprehensive study on transport in the city of Baghdad. The study area covered an area of 927 square kilometers and formed all areas of development and development at the time, Which is part of the development plan for the target year (2000). It was through the study of the comprehensive transport of the city of Baghdad evaluation of the public transport system, including the alternative routes of the metro network The consultant has proven the proposed metro routes by the studies prepared by companies contracting with the Ministry of Transport to prepare a study General to move within the final planned mass transfer target year (2000).
- In 1981 it has been worked with the British Metro Consultant Group (BMCG) as a general consultant to prepare the basic design for the first phase of the project (Basic Design) and prepare the specifications as well as to supervise and assist the Iraqi side in checking the detailed designs of the project The first linking Sadr City with Adhamiya and the second line connecting Karrada near the Uqba bin Nafi square with Mansur (ie, the tracks provided under the Rapid and Modified Transport Study (1980) were adopted.
- The designs and schedules of the first line were completed in 1986 under the supervision of the Ministry of Transport and General Counsel BMCG.

Project History

- Under the Cabinet of Ministers Committee on Economic Affairs No. (377) in (13/4/2008) was entrusted the Municipality of Baghdad directly to the project Metro Baghdad, where the Committee decided that the economic affairs of the project is the responsibility of the Municipality of Baghdad (using the expertise in the Ministry of Transport).
- The Municipality of Baghdad published a declaration of interest in the Iraqi newspapers and channels for the purpose of preparing the technical, legal and contractual requirements for the project, where a number of companies expressed their interest in the subject, which resulted in a short list under which invitations were issued, which led eventually to the contract with French company Sistra.
- The contract signed with French company Sistra was executed on 26 December 2011.


Project Summary

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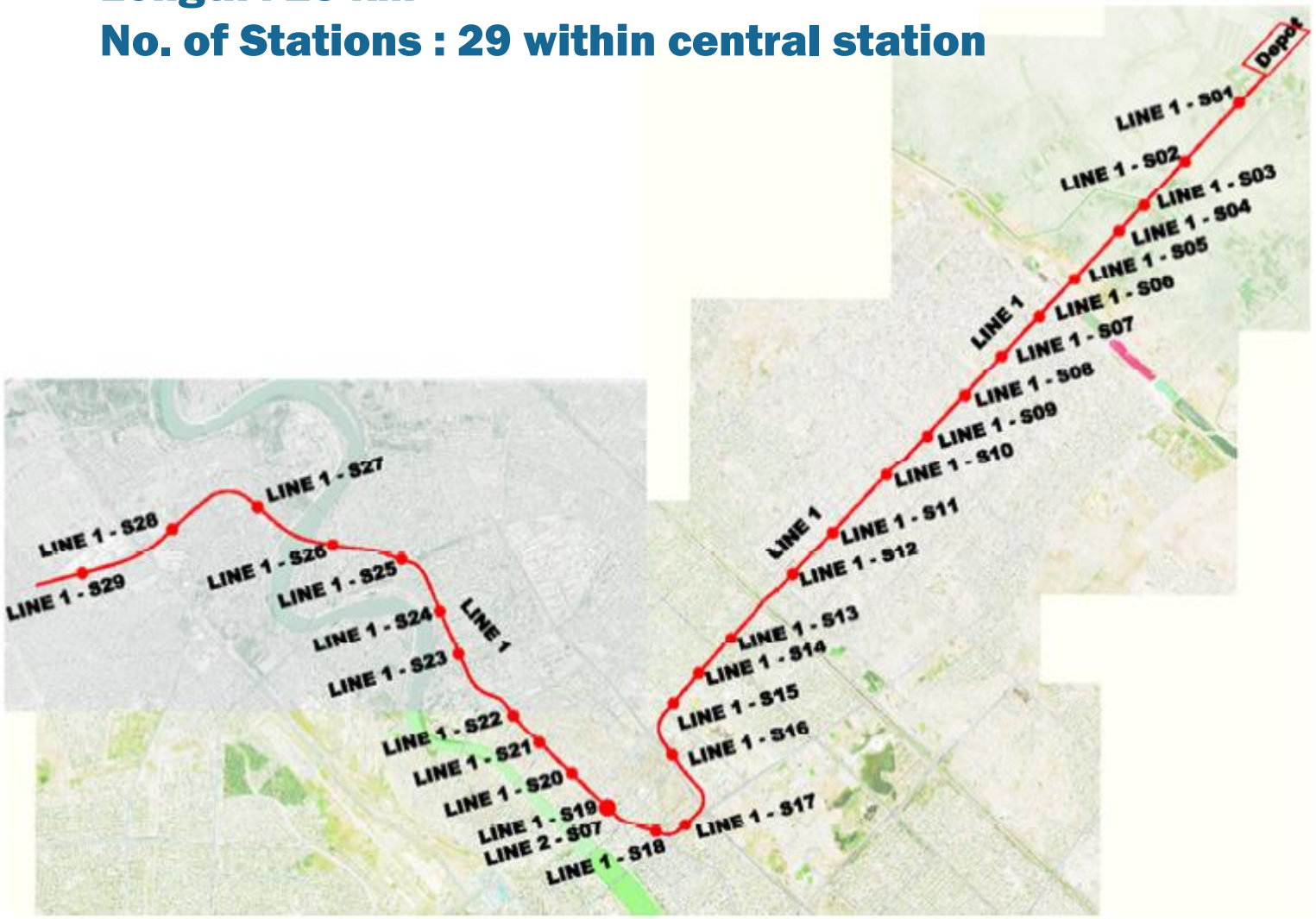
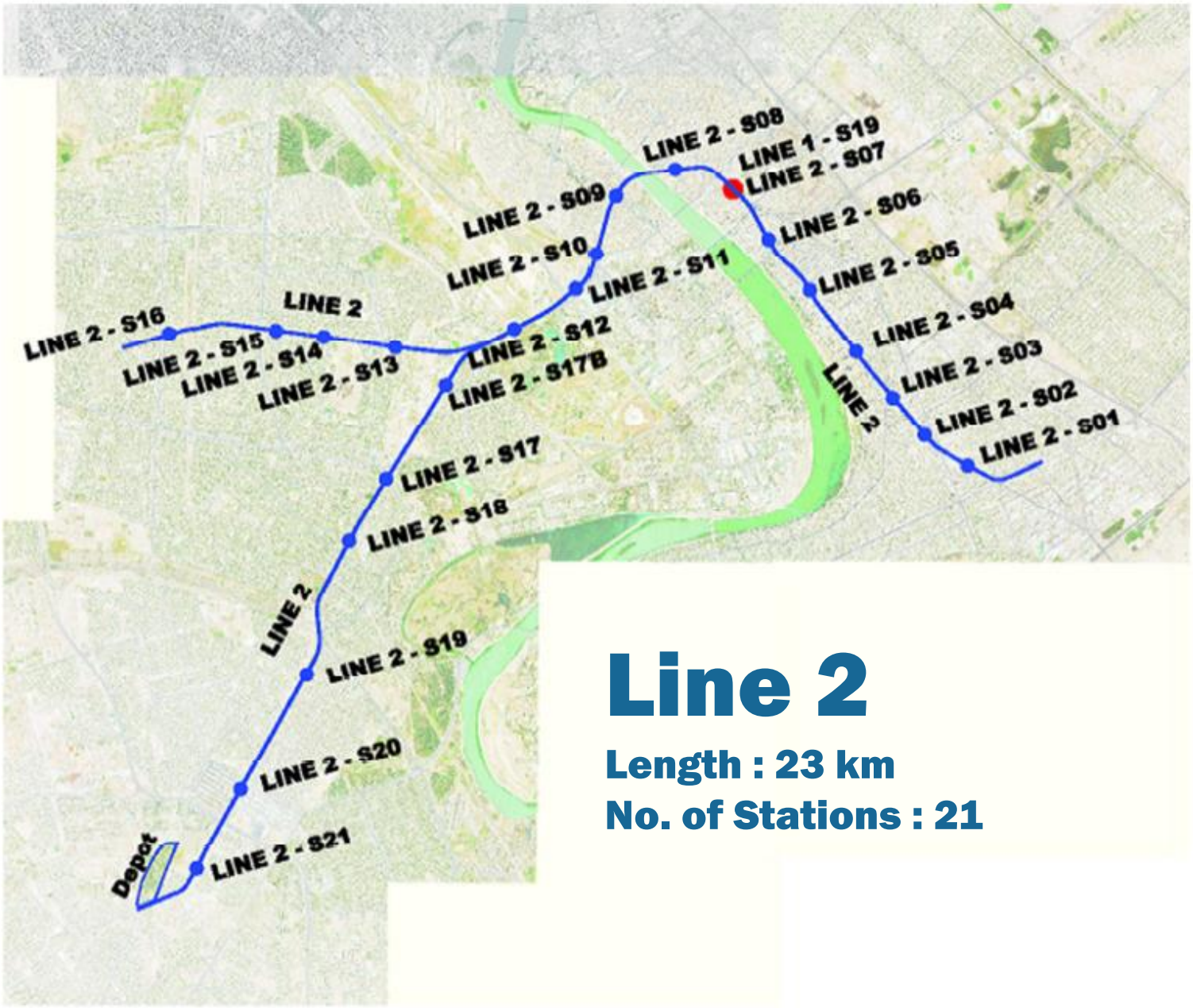
- It consist of two lines with full length of about (51 km) with (50 Stations) within the Central Station witch is represent the convergence of these two lines located in front of the Baghdad Municipality building location.
- All metro lines and stations are underground.
- The proposed method of implementation of all tunnels is by using the TBM machine and the proposed method for most of stations is the open cut method.
- The electric power for the project is provided from the national source that's why the metro project include implementation of three new transformational power sectors.

Line 1

Length : 28 km

No. of Stations : 29 within central station

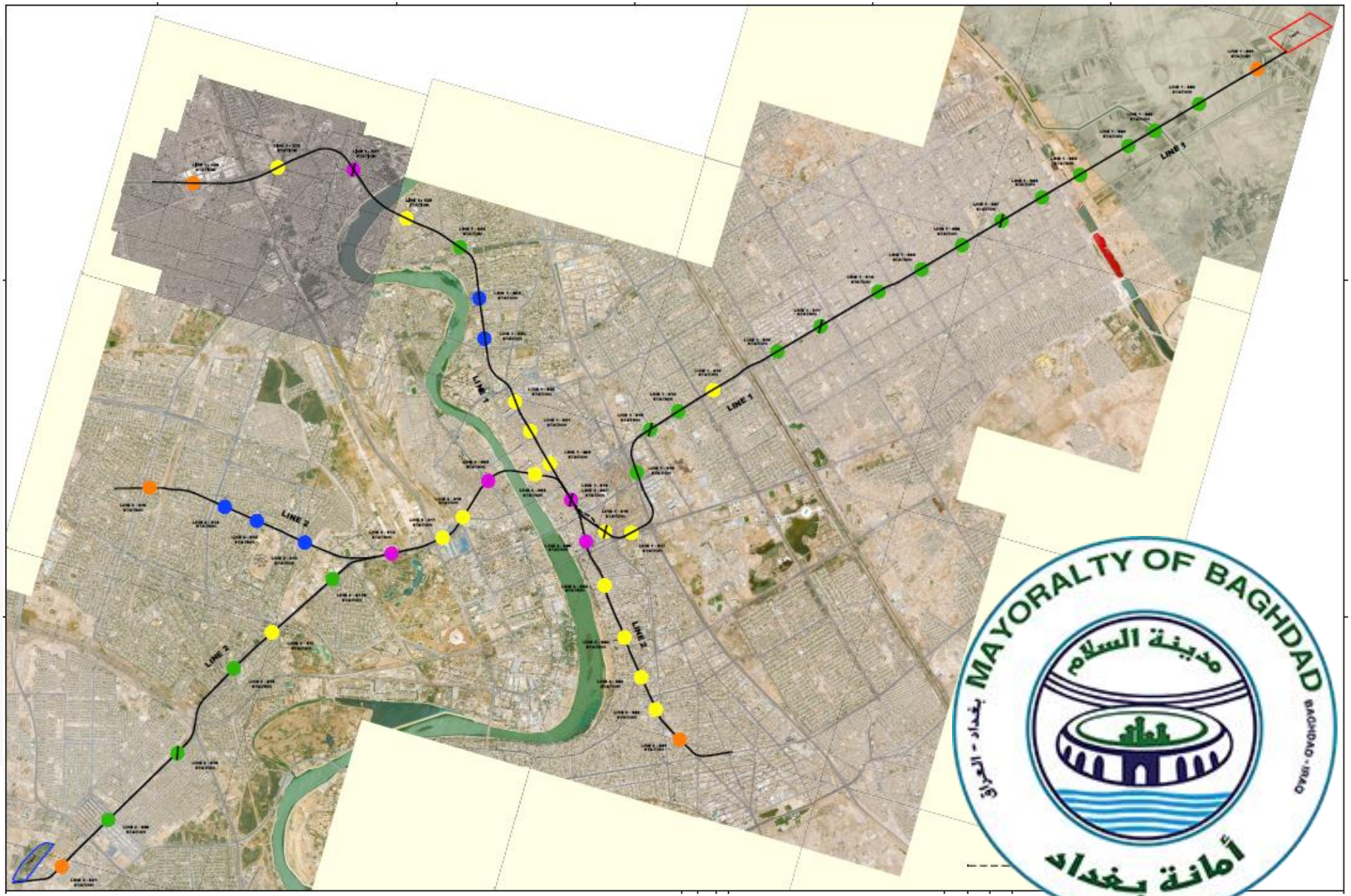




Line 2

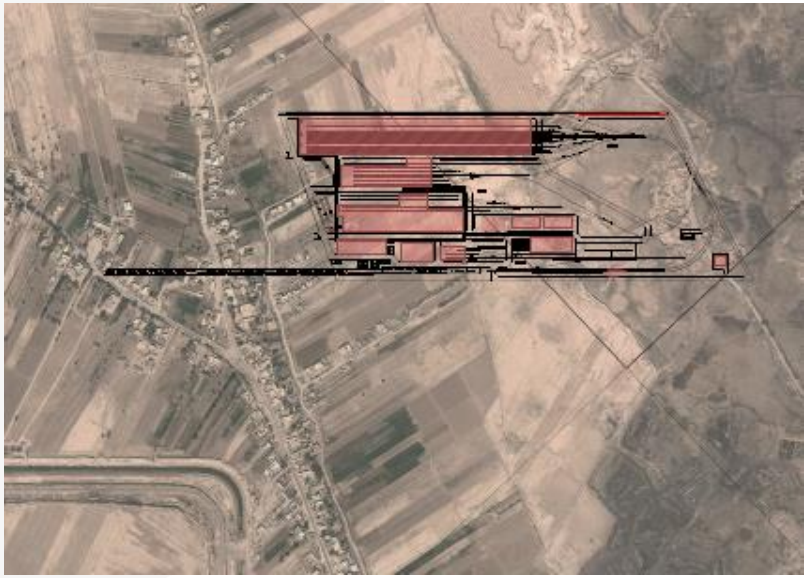
Length : 23 km

No. of Stations : 21


LINE 1
LINE 2
LINE 1
LINE 2
LINE 2
MAYORALTY OF BAGHDAD
BAGHDAD - IRAQ
بغداد - العراق
مدينة السلام
أمانة بغداد

Project Summary

- The main depot will be located along line 1 (close to New Sadr City) it will house the heavy maintenance facilities for both lines and light repair workshop as well as stabling building for Line 1 rolling stock fleet. It will also house the administrative building, the back-up OCC of Line 1, training Centre.
- The light depot will be located at the end of the southern branch of Line 2 near the terminal station L2-S21. It will house mainly the light repair workshop, the stabling building for Line 2 rolling stock fleet as well as the back-up OCC of Line 2.

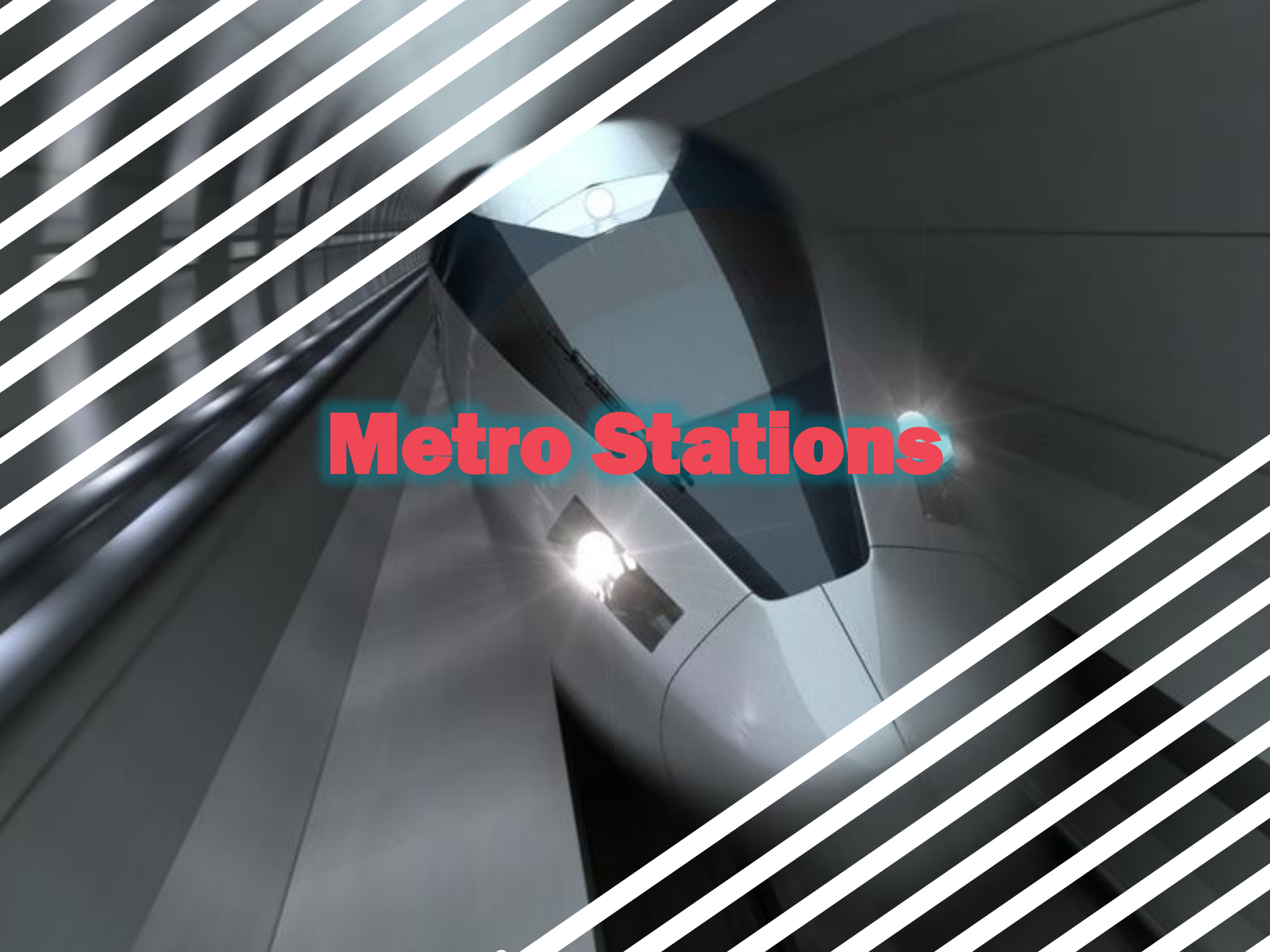


Depot 1

Depot 2

Project Summary

- The 2 lines will be operated from two separate Operation Control Centre room (OCC) located within Baghdad Municipality Station. Main Security Centre for the two lines will be also located in Baghdad Municipality Station. There will be one Back-Up OCC for each line, Back-Up OCC for Line 1 will be located in Depot Line 1 and Back-Up OCC for Line 2 will be located in Depot Line 2.
- Baghdad Underground Metro Line 1 and Line 2 shall be designed, sized and built in order to carry at its ultimate capacity a passenger flow of 45,000 PPHPD at comfort of 5 pass/m² with 2 minutes headway. The train capacity shall be 1,500 passengers at 5 pass/m² over a maximum length of 150m and The maximum operating speed for both lines is 80km/h.


Metro Stations

Metro Stations

- The project consists of (50) stations serving the project, which includes the first line (28) station and the second line contains (21) station except the central station and there are many stations that have been developed the initial design in a distinct manner has been arranged areas allocated to stations and special implementation method In order to fit the available land as much as possible through the preparation of their own designs and propose the method of implementation, as an example of the distinguished stations Saha Khalani station (Central Station), station Rashid Street, Tahrir Square Station Haifa Street Station, Antar Station station, Al Fares Arab station.

Central Station


Estimated Cost

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- The cost of implementing the total project, including the detailed designs and implementation of the first and second lines, is about € 6.5 billion (approximately $ 7.2 billion), according to the study conducted by the French company, which is detailed as follows :
- Cost of implementing the first line / 3.7 billion euros.
- Cost of implementation of the second line / 2.8 billion euros.
- In addition, an estimated amount of land acquisition required by the project is set at $ 1 billion to reach an estimated total of approximately $ 8.2 billion.
- The EPC Document has been prepared with a turnkey system.
- The estimated duration of implementation of the project is about (6 years) if the implementation of the two lines together.