حكومة جمهورية العراق
رئاسة مجلس الوزراء
مكتب رئيس الوزراء

Government of Iraq
Presidency of the Council of Ministers
Prime Minister's Office

مترو بغداد
METRO BAGHDAD

RFI

Request for Information

Baghdad Metro Rail Project

Mass Rapid Transit System,

20 February 2024

1. Project Description

The Baghdad Metro project is considered one of the major projects and is considered a means of rapid and mass transportation for large numbers of people to work from the networks. Given the great and increasing importance of a large number of people in Baghdad and the daily mass visits from the rest of the governorates for various purposes, as well as within Baghdad, the need for large, advanced means of transportation emerges to achieve Safe and large-scale public means of metro trains to serve this type of transportation that is compatible with the needs and conditions of the country, which is considered a construction-based means of transportation and one of the elements of clean construction using safe electrical energy.

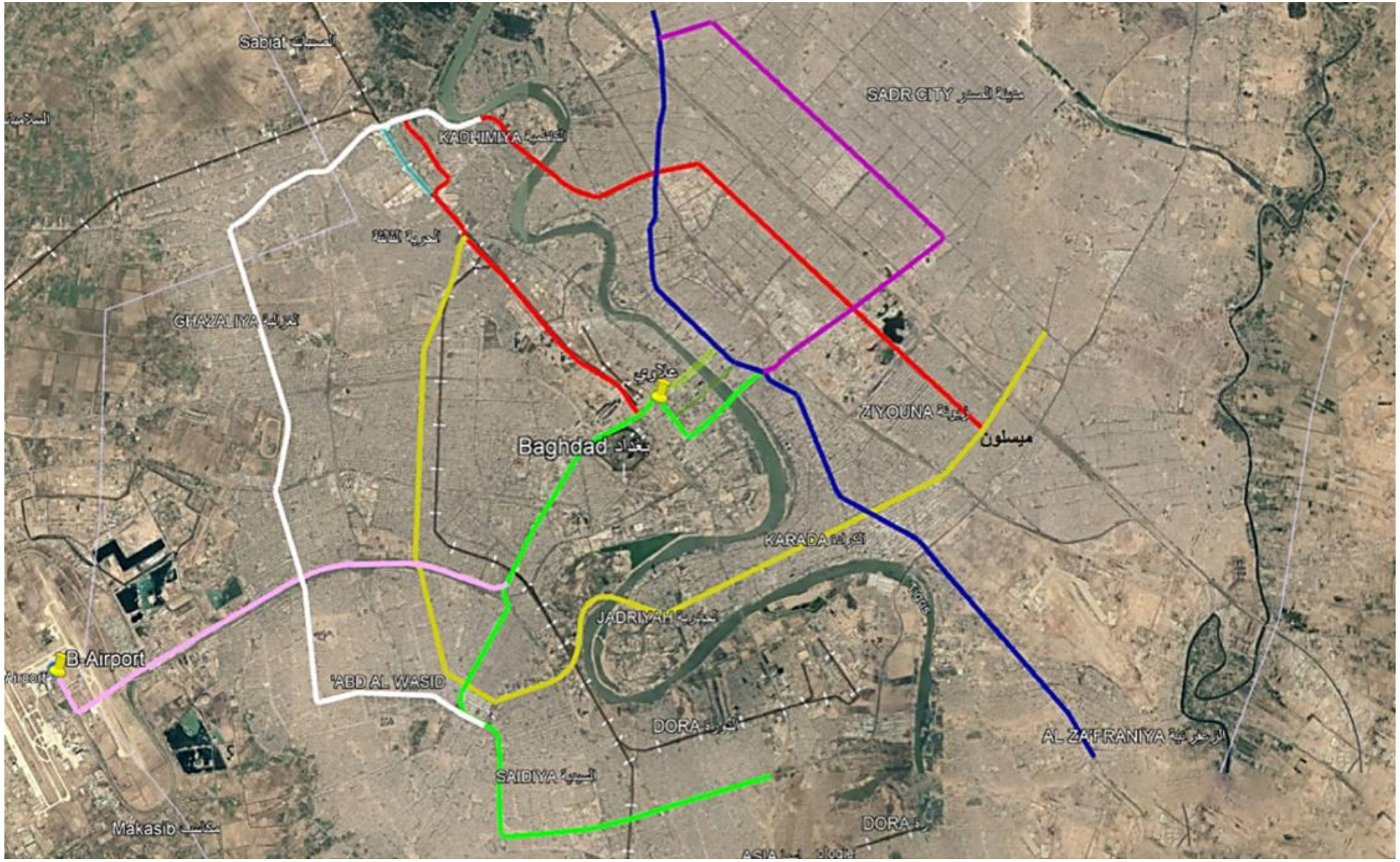
Baghdad Metro is a group of lines and large numbers of advanced trains that operate automatically and operate without a driver. The metro lines pass through stations above and below ground and with two tracks back and forth.

The Baghdad Metro Project includes seven (7) main lines (Routs) with a total length of more than 148 km, sixty-four (64) metro stations, 4 workshops and depots for depot trains, several metro train control and management centers called Operations Control Center “OCC” and seven main power stations MPS for 250 mega watt power as electricity generation stations .

These trains are fully equipped with CCTV and internet systems. Passengers also have USB ports, so Gold Class passengers can charge their mobile phones and tablets.

It includes special compartments for women and children, and seats for people with special needs, pregnant women and the elderly.

The numbers mentioned in this report are subject to change and negotiation after obtaining the owner’s approval of the designer’s proposals and decisions and the results of feasibility studies.

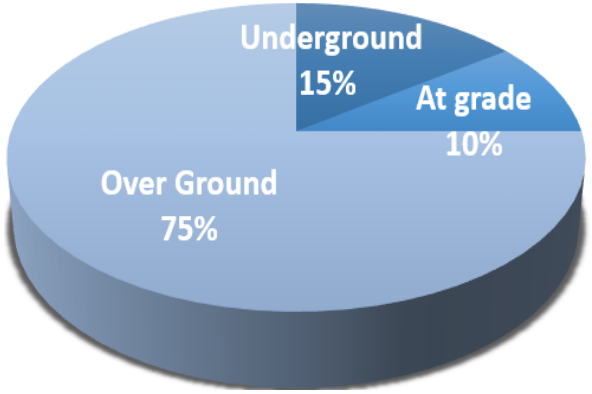

Sabiat
KADHIMIYA
SADR CITY
GHAZALIYA
علاوي
Baghdad
ZIYOUNA
ميسلون
KARADA
JADRIYAH
B Airport
'ABD AL WASID
DORA
AL ZA'FRANIYA
SAIDIYA
Makasib
DORA

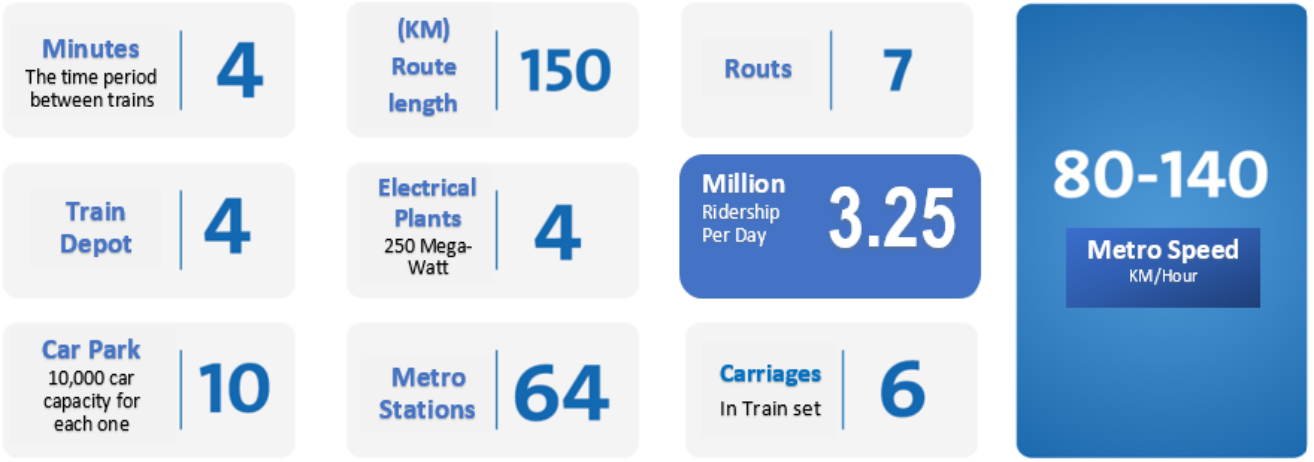
Routs of Baghdad Metro

	Route name	Distance km	Terminal	Names of stations in regions and squares								Terminal
1	**Green line**	19	Al Alawi	Al Mansour	Al Nusour Sq.	Al Yarmouk	Al Bayaa	Al Eelam	Al Saydiya	Station		Doura
2	**Red line**	27.7	Al Alawi	Adan Sq.	Al Kadhimiya	Al Adhamiya	Antar Sq.	Al Mustansiriya	Qanat Al Jaish	Station	Station	Maisaloun Sq
3	**Blue line**	22	Al Shaab	Al Waziriya	Al Jamhouriya St.	Al Khallani Sq.	Al Tayaran Sq.	Al Andalus	Uqba Bin Nafi Sq.	Station		Al Zuafaraniya
4	**Purple line**	14.5	Al Tayaran Sq.	Hamza Sq.	55 Sq.	83 Sq.	Nadi Al Naft Int.	Ur	Station	Station		Al Shaab
5	**Yellow line**	30	Al Baladiyat	Maisaloun Sq	Uqba Bin Nafi Sq.	Al Hasanain Sq.	Al Chadriya Sq.	Al Bayaa	Hay Al Jamiaa	Station		Adan Sq.
6	**The white line**	23	Al Kadhimiya	Al Shulah	AL Gazaliya	Al Khadhraa	Al Amiriya	Al Amiriya	Al Eelam	Station		Al Bayaa
7	**Airport line**	12	Baghdad Airport	Al Amiriya	Al Amiriya	Hay Al Aamil	Al Bayaa	Um Al Tubol	Station	Station		Al Qadisiya
	The Total	148										
	Underground	15%										
	At grade	10%										
	Over Ground	75%										

There are other stations that may be added by the investor and his consultant based on the results of the feasibility study at a rate of 2.5 km.

(Stations and Railway) types





Metro capacity for ridership

The absorptive capacity depends on the results of the feasibility study that the investor will conduct. Note that the expected number of metro passengers per day is **3,250,000**, or approximately three and a quarter million, although the final number depends on the results of the recommendations of the feasibility study that the investor will conduct.

Each metro train consists of several fully air-conditioned cars, with a total capacity based on the recommendations of the feasibility study, and includes special compartments for women and children, and seats for people with special needs, pregnant women, and the elderly.

Metro Baghdad speed is (80-100)Km/Hour.

2. Main Components of the project project

3.1 Stations

The stations are facilities for receiving passengers and those departing from the metro and include several elevators, movable and fixed escalators, ticket sales areas, many shops, cafeterias, bathrooms, administrative and service rooms for air conditioning, electricity, communications and control, platforms for receiving buses and cars, and designated parking lots for them and passengers.

The metro station consists of two platforms, one for departures and one for arrivals, completely isolated and separated from each other also consists of Platform screen doors (PSDs) for Safety and climate considerations. Some have terminals at the end of the line, some in the middle, and others shared between two lines (exchange station)

3.2 Trains

The type of trains used with the railway network will be express high speed type, with an estimated speed of (80-140 km per hour). These features and specifications can be provided through a metro system that runs on electric power and without a driver, as it operates automatically, is air-conditioned, and has all means of communication and frequencies necessary for telephones and all means of safety.

3.3 Calculating numbers of trains & Carriage

The number of trains and carriage is determined by the number of working hours, the number of passenger seats in one car, and the speed of the train, all of which depend on the results and recommendations of the feasibility study that will be presented by the investor, taking into account the presence of reserve trains, as shown below in a preliminary manner, as the final detailed preparations will be taken after preparing Design studies and computer simulations by the investor, as well as depending on the speeds required for the trains.

3.4 The Depots and workshops

It includes a group of specialized buildings that serve metro trains. Baghdad Metro includes 4 depots.
Depots include several types of complex and specialized service buildings for maintaining, washing and cleaning trains, changing wheels, maintaining railway corridors, changing tracks, storing equipment and everything related to changing directions and turns of metro trains with the control building.

3.5 Viaduct “Train tracks”

In many areas, the metro routs will be raised above the ground for safer access and avoid any conflict with streets and human infrastructure services in the future. Rail is designed to land in some key cost areas. Or underground as tunnels using a tunnel boring machine TBM.






3.6 Tunnels

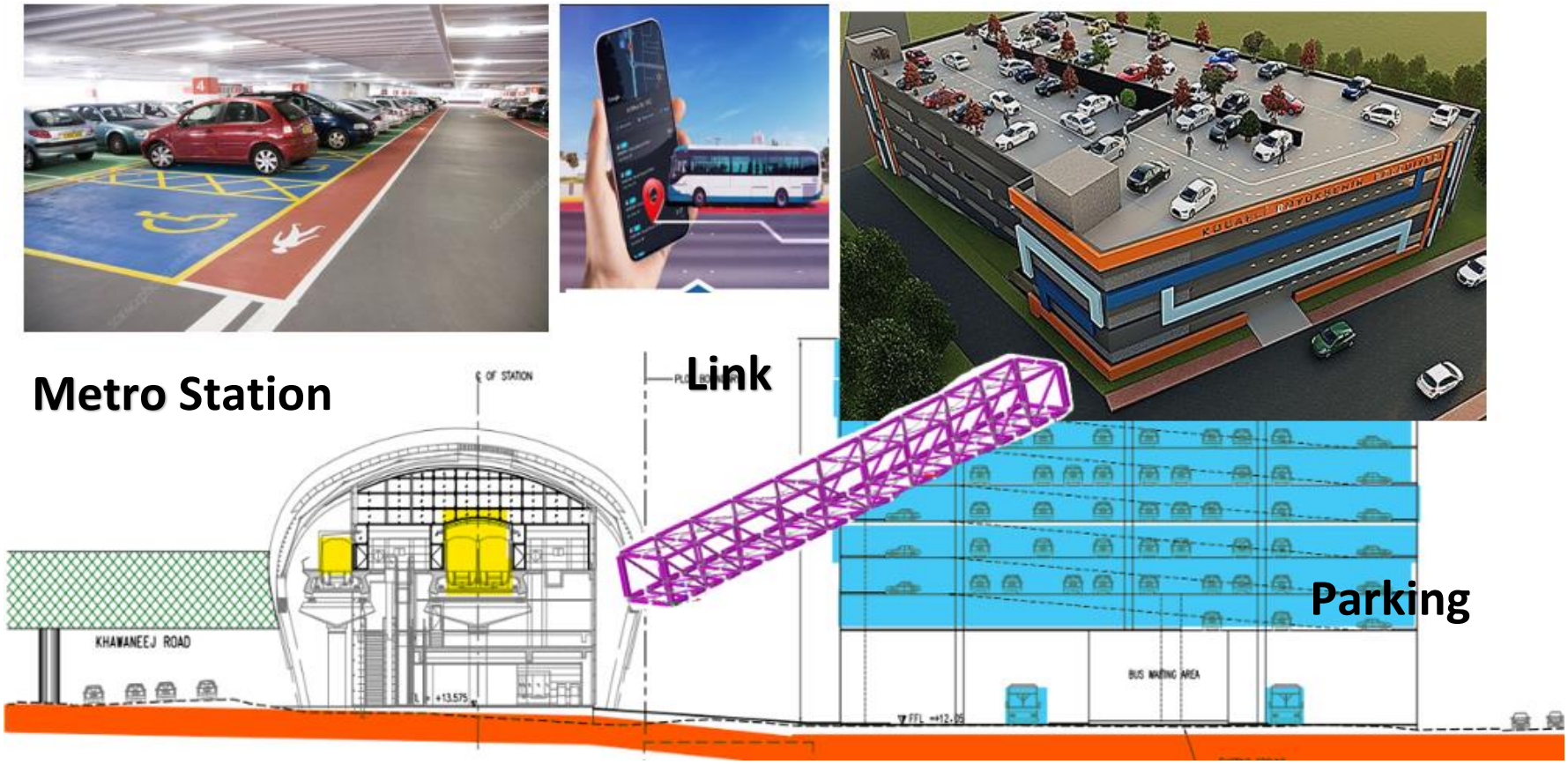
The metro railway goes underground through tunnels dug with giant excavators called tunnel boring machines (TBMs) at levels more than 20 meters below the surface of the earth when absolutely necessary to avoid any conflicts with streets and infrastructure services or in crowded areas with narrow streets and river crossings.





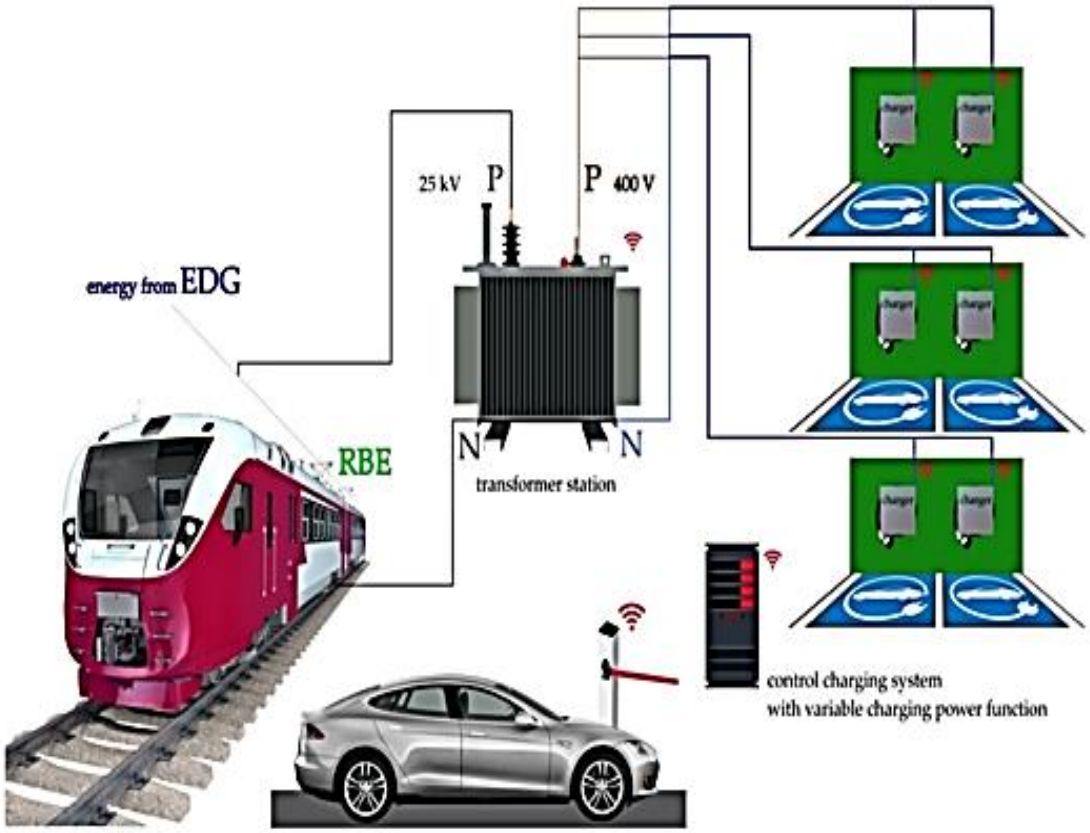

3.7 Parking for cars & buses

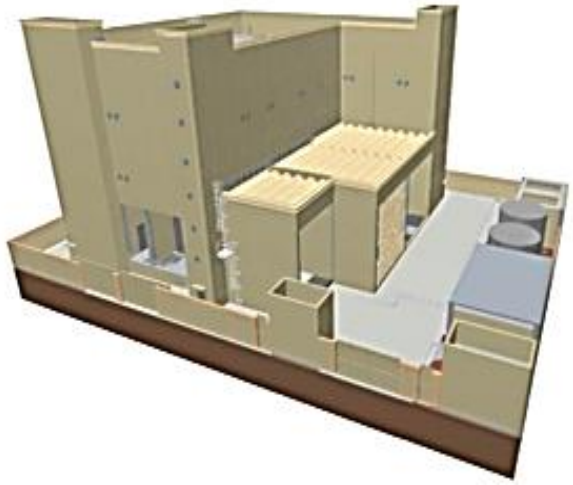
There are 10 parking with 10,000 car park capacity for each .Metro stations are connected to a wide network of other means of transportation, such as buses and taxis.



3.8 Metro power plants

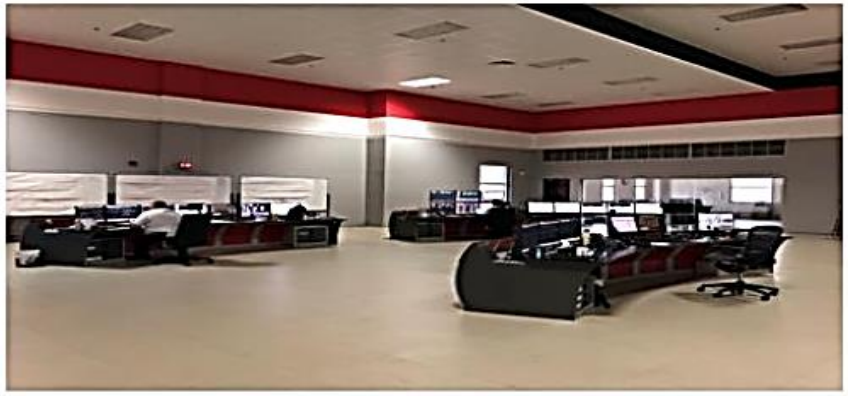
These are stations that generate electricity needed to operate trains and all metro buildings, and usually have a capacity of 250mega watt for 4 power plants in this project.





3.9 Operationcontrol and command centers “OCC”

These buildings include all the equipment and devices for controlling trains, programming the movement, speed, and timing of trains, security control, and everything related to monitoring devices, sensors, cameras, and driving trains.



OCC Room

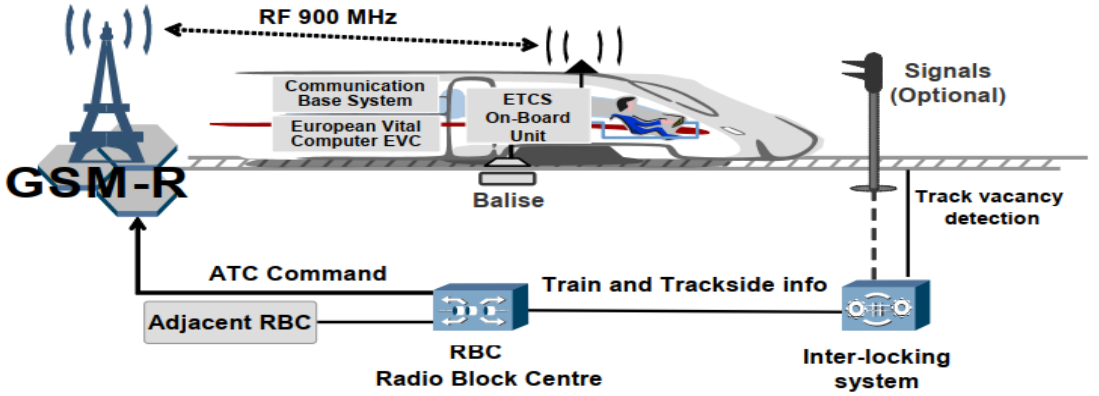
S&C Room

Crisis Room

Talis Converter

3.10 Communications Systems “ frequencies and towersGSM “

Communications form the backbone of this type of advanced transportation, and several GSM communications towers are installed Along the track of the railway and the trains, special frequencies and spectrum packages are reserved for this from the Ministry of Communications, and several advanced devices are used connected to the railways to give complete information about the speed of the train and precisely determine its location, as shown in .the figures and pictures below.



Point Machine

Marker Board

Axle Counter

Balise

3. Future expansion

Due to the great need to connect Baghdad, the capital with a high population majority, the Baghdad Metro will be connected in the future to train lines coming from the suburbs of Baghdad and other cities, and branches will be .added to some lines within specific areas in Baghdad.

4. Economic revenues

Due to the speed of the metro, the shortened time, the available comfort, and the means of safety, it is expected that usage will increase very significantly. Therefore, selling tickets at an acceptable price to hundreds of .thousands of travelers daily will achieve very large profits.

5.1 Air transportation profits And airports

There is a line linking Baghdad International Airport to the rest of Baghdad, and it is expected that the number of passengers arriving and departing from the airport will increase according to statistics in recent years. This metro will achieve easy and fast transportation that will be very acceptable from inside and outside Iraq and will increase .the economic income of Baghdad Airport.

5.2 Reducing state subsidiesfor car Petrol

One of the advantages of this transportation is that it will reduce the use of cars, reduce congestion, accidents and pollution, and will give another economic return to the state because it will reduce the use of private and public cars and thus reduce fuel consumption, which in turn has enormous economic benefits by reducing the burden on the state's support for vehicle fuel

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Thank you

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