Investment Opportunities
In
Transportation Infrastructures

First informal preparatory meeting for the 14th session
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Outline

- **Investment environment in infrastructures of transportation in Iran**
- **Government supports and legal regime for entrance into a PPP agreement**
- **Future statistical plan**
- **Proposed freeways & railways as investment opportunities**

Investment environment in infrastructures of transportation in Iran

In Iran international regulations are the basis for rules governing financing.

The ancient country of Iran, with is glorious history and civilization, is at the verge of novel historic era, emanating from national security and stability and heralding new days of liaison and interaction with the world, where Iran would play a more significant role in the global community for confronting problems and building a better world for the humankind.

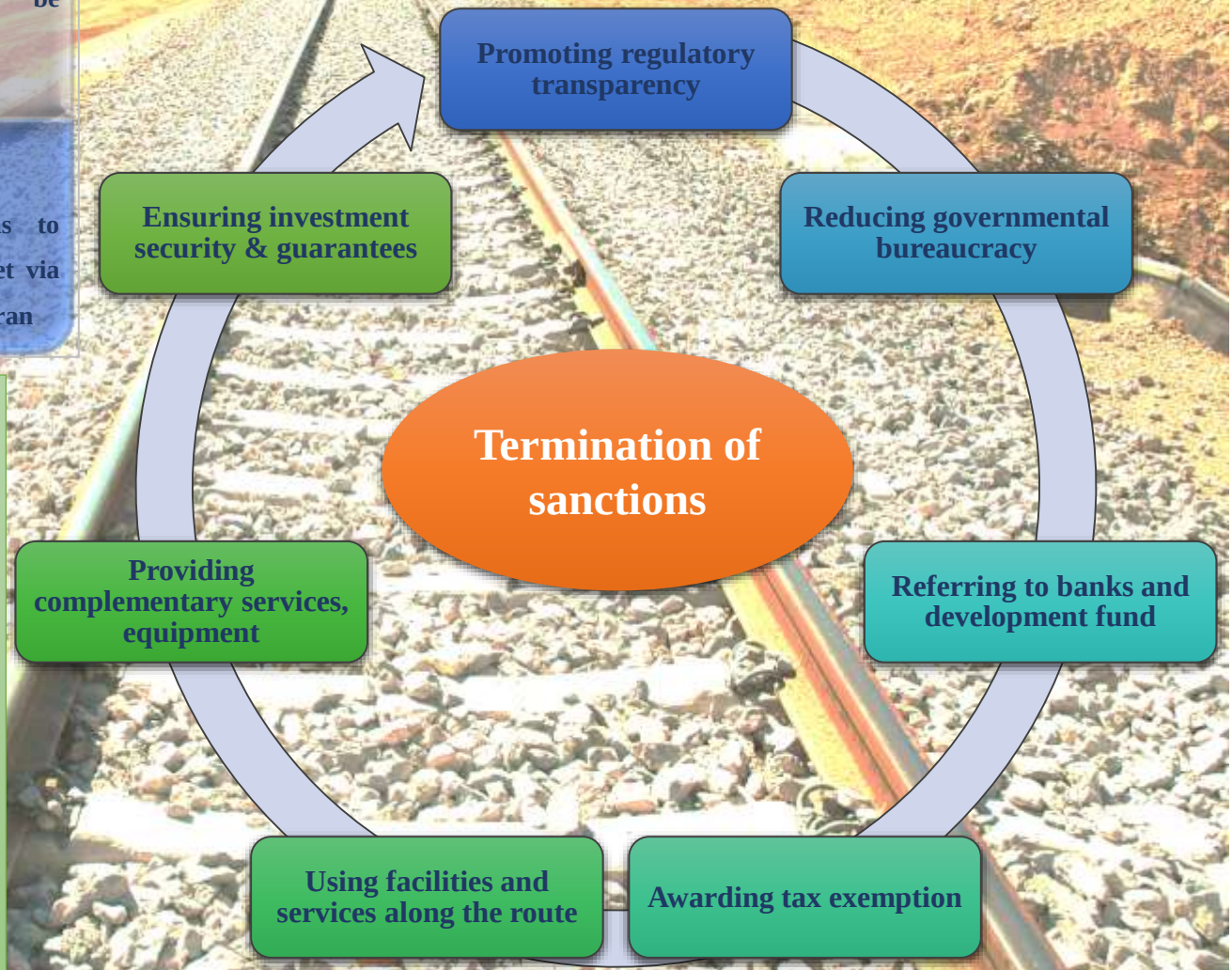
The removal of sanctions and preparedness of Iran to promote transaction with the world have fostered abundant economic opportunities through which different countries can enjoy attractive profits while participating in the Iranian development process. The Iranian government , and the ministry of roads and urban development have paved the way for such cooperation, and measure such as promoting regulatory transparency, reducing governmental bureaucracy, referring interested parties to banks and the national development fund to receive facilities, awarding tax exemption, providing for additional revenues and investment opportunities arising from using other facilities and services along projects, providing for the sales of complementary services, equipment and parts, and ensuring investment security and guarantees are some of the incentives considered for investment in this sector . As a profitable industry, the Iranian transport sector can count as a favorable prospect for investors interested in business endeavors with sizeable profits and negligible risks.

Investment environment in infrastructures of transportation in Iran

The Main Reasons for Iran Strategic Statues in Transit

- Iran political and economical security which brings political and economical security to other countries
- Revenues earned by northern, southern, eastern and western transit corridors could be equivalent to oil revenues
- Easy access to regional natural resources for the sake of exporting raw materials
- China's economical plans to reach the European market via the silk road and crossing Iran

As one of the bodies affiliated with the Iranian ministry of roads and urban development, the construction and development of transportation Infrastructure Company (CDTIC) is responsible for constructing various types of transport infrastructure in the country. At the time being, over 1100 kilometers of freeways and 3000 kilometers of railways are ready for investment, and interested parties can cooperate in the executing these huge projects through different forms of partnership.



Government supports and legal regime for entrance into a PPP agreement

Government policy and process on private participation in development of transportation corridors of Iran

Ministry of Roads and Urban Development

Transportation Infrastructure Construction and Development Co.

D.O. Road Construction & Development	D.O. Freeway Construction & Development	D.O. Railway Construction & Development
FS & issuing the required licenses	FS & issuing the required licenses	FS & issuing the required licenses
Government funding	PPP model	PPP model
Possible participation in construction contracts and engineering services	BOT- Project fund- structured finance- FDA	BOT- BLT- project fund- structured finance- FDA

Government supports and legal regime for entrance into a PPP agreement

Foreseen Strategies of the 6th Social, Economic and Cultural Development Plan (2016-2021)

Government Supports and Legal Regime for Entrance into a PPP Agreement

- To reinforce and equip transport links accommodating population growth and economic expansion; and considering the increase of the railway portion of cargo, passenger transport, among the priorities;
- To complete and increase the efficiency of international corridors (crossing the country) in an attempt to enhance competitive capability.
- To increase freeway and highway network role portion among road transportation network;
- Capacity development to expand cargo and passenger transport so as to increase Iran share in international commerce;
- Providing the suitable context for encouraging private investment both at local and global scale;
- Construction of high speed railways;
- To connect provincial capitals to freeway, railway and network;
- To link provincial capitals with the railway, freeway and highway networks.

Government supports and legal regime for entrance into a PPP agreement

Legal Incentives of Investment in Transportation Infrastructure

Foreign Investment Promotion and Protection Act (FIPPA)

- Recognizing the rights and interests of foreign investors, protection against non-commercial risks, facilitating the free flow of investment return, and full compensation for expropriation and/or halting foreign investor activities.

Partnership Act

- At the end of operation period, if the investment costs of the project are not depreciated, operating period shall be extended until the depreciation of investment will be completed.

Article 12 Eliminating Competitive Product Obstacle Law

- It has been stipulated that if an investment results in saving fuel consumption, the investor is allowed to return the portion of investment that is equal to value of fuel saving. Therefore some portion of investment can be guaranteed by Ministry Of Petroleum.

Note 2, Clause "J" of the Annual Budget Law of the Current Year

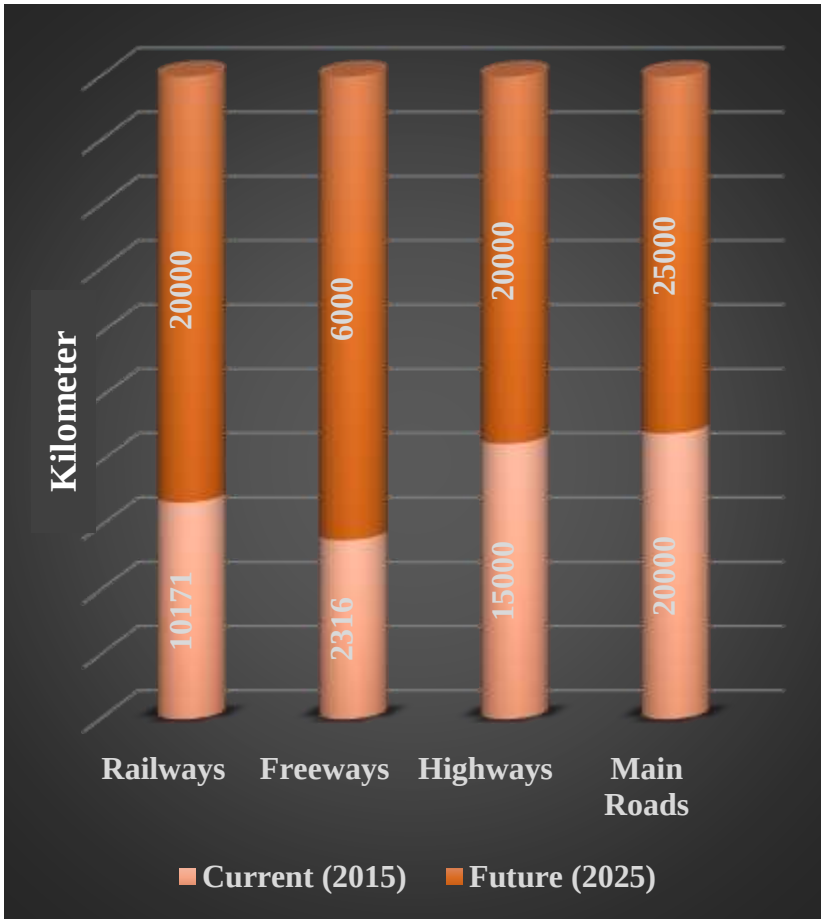
- Providing private investors with cost free tar as governmental cash out in freeway projects.

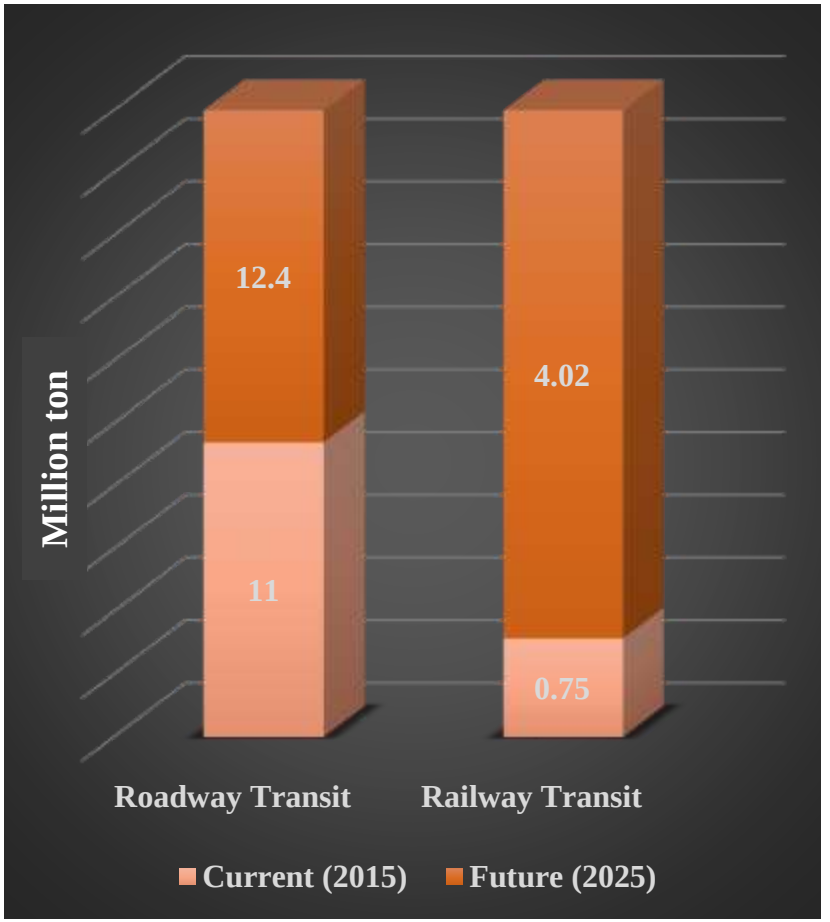
Government supports and legal regime for entrance into a PPP agreement

Investment Legal Motives in Transportation Infrastructure

- **Iran Transportation Status**
  - Iran strategic location in the region and its access to warm waters
  - International corridors that cross Iran from north to south and east to west, also high cargo passenger transit rate
- **Potential Investment Benefits**
  - The growing demand for cargo and passenger transport due to population growth and expansion of economic and tourism activities
  - The possibility to create investment opportunities and additional income by utilizing the facilities during operation
  - Many factories, mines and mother industries exist in Iran which in turn necessitates development of an efficient transit network
- **Economical Advantages**
  - The possibility of creating a multi modal transportation system
  - Exploiting direct benefits and revenue during operation period
  - The possibility to sell equipment, products, complementary services and new technology
  - Tax exemption
- **Factors Influencing Investment Return**
  - Low final cost due to low wage, material and energy costs
  - Relative high interest rates compared to the international market
  - Defining toll growth rate proportionate to inflation rate
  - Low rate risk compared to capital market investment and the possibility to delegate risk management to the investor

Future Statistical Plan

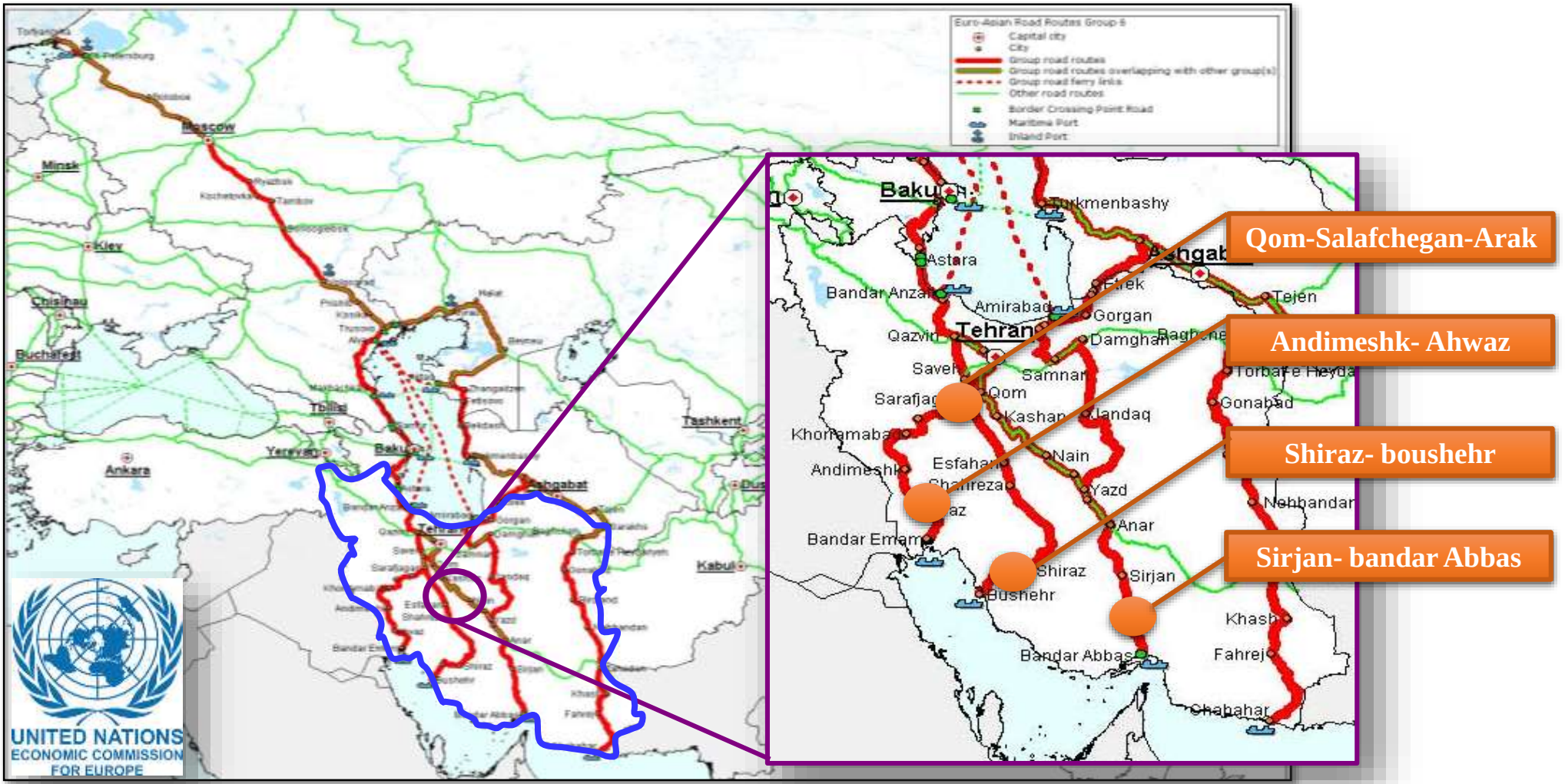




Freeway Investment Opportunities

Inter-regional Freeway Corridors

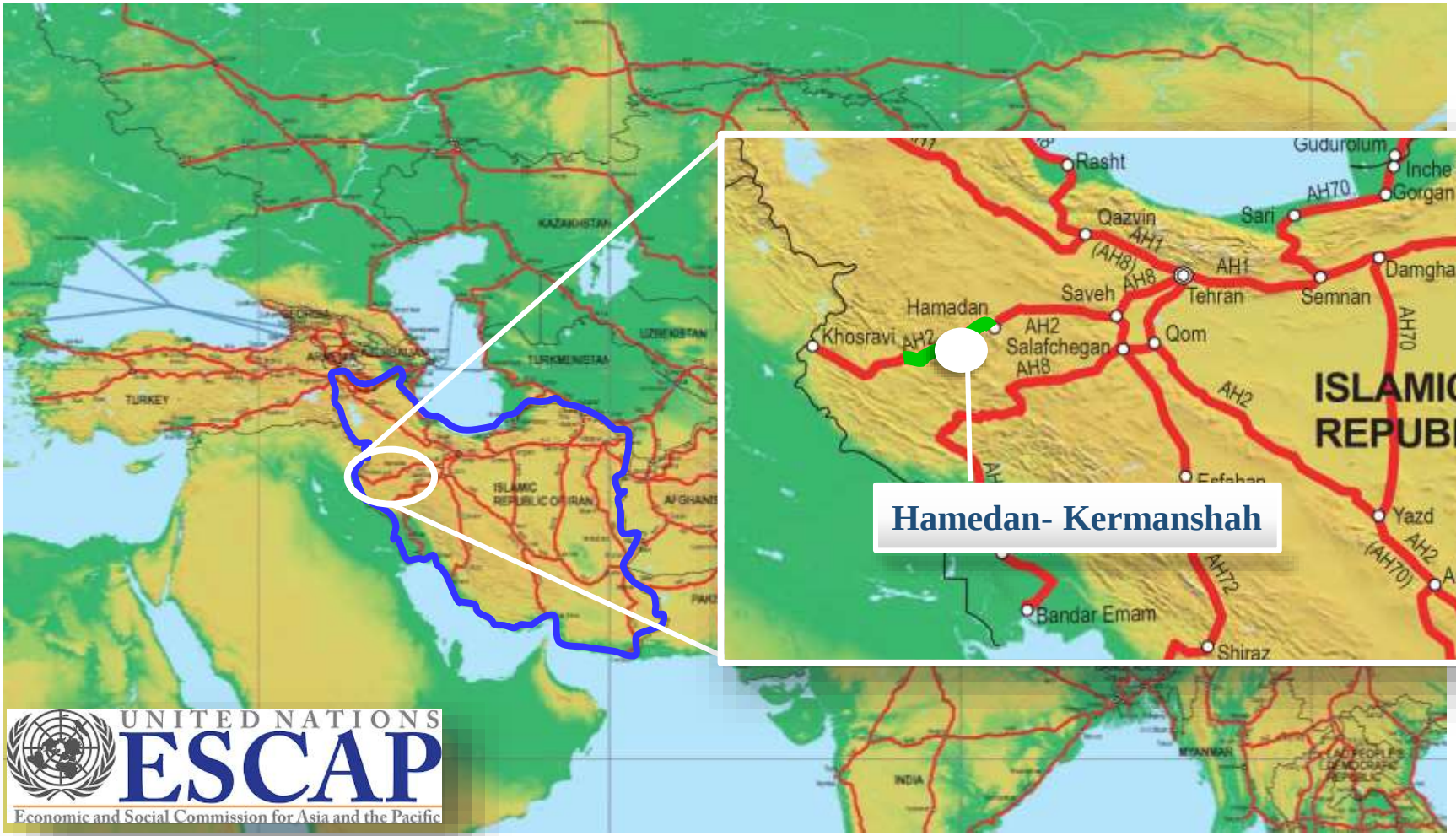
Euro-Asian Transport Links – Road Routes 6



Web: www.UNECE.org/trans/main/eatl.html

Inter-regional Free way Corridors

Asian Highway – AH2



Iran Freeway Network

Investment opportunities of Freeway

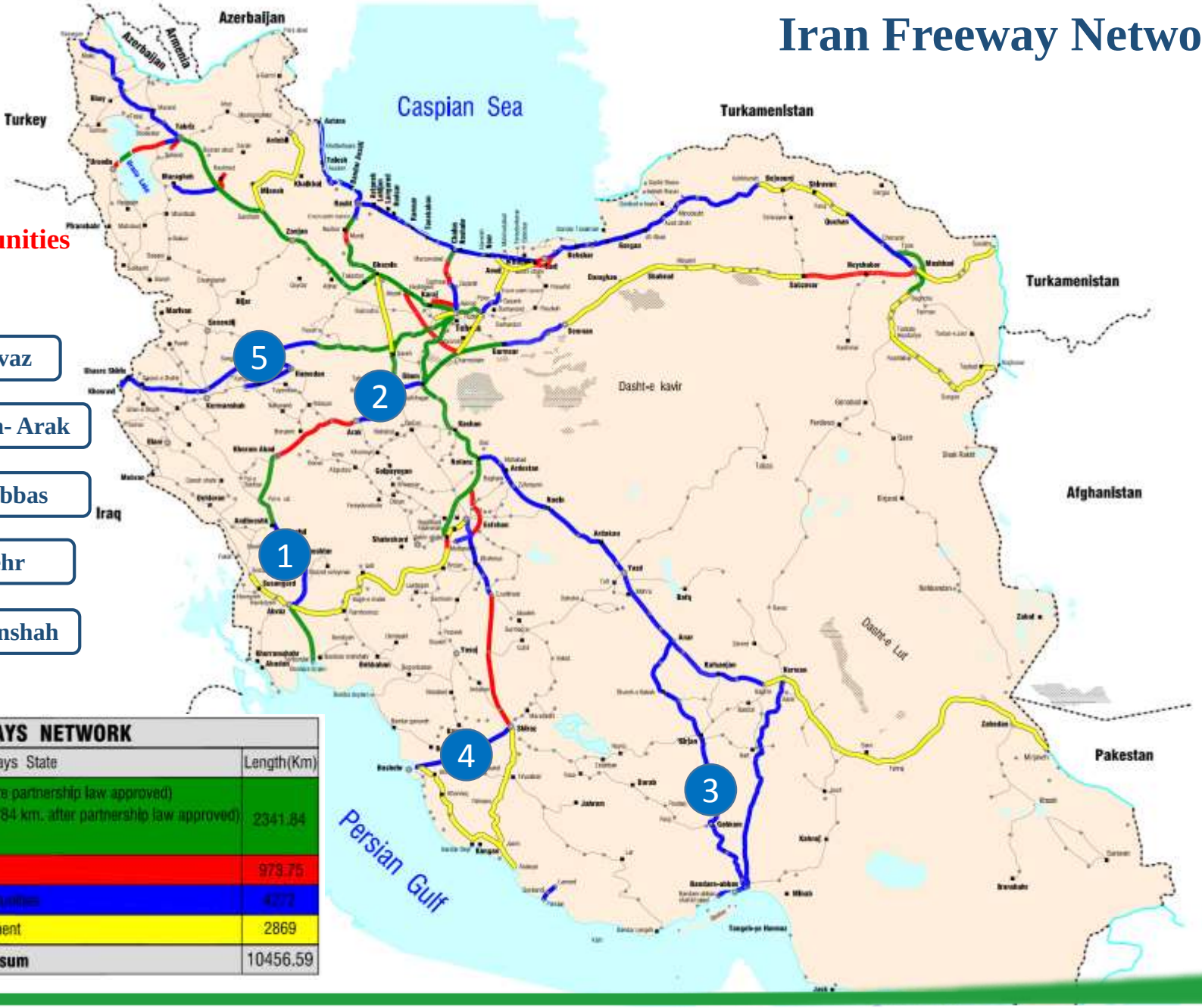
1- Andimeshk- Ahvaz

2- Ghom- Salafchegan- Arak

3- Sirjan- Bandar Abbas

4- Shiraz- Boushehr

5- Hamedan- Kermanshah



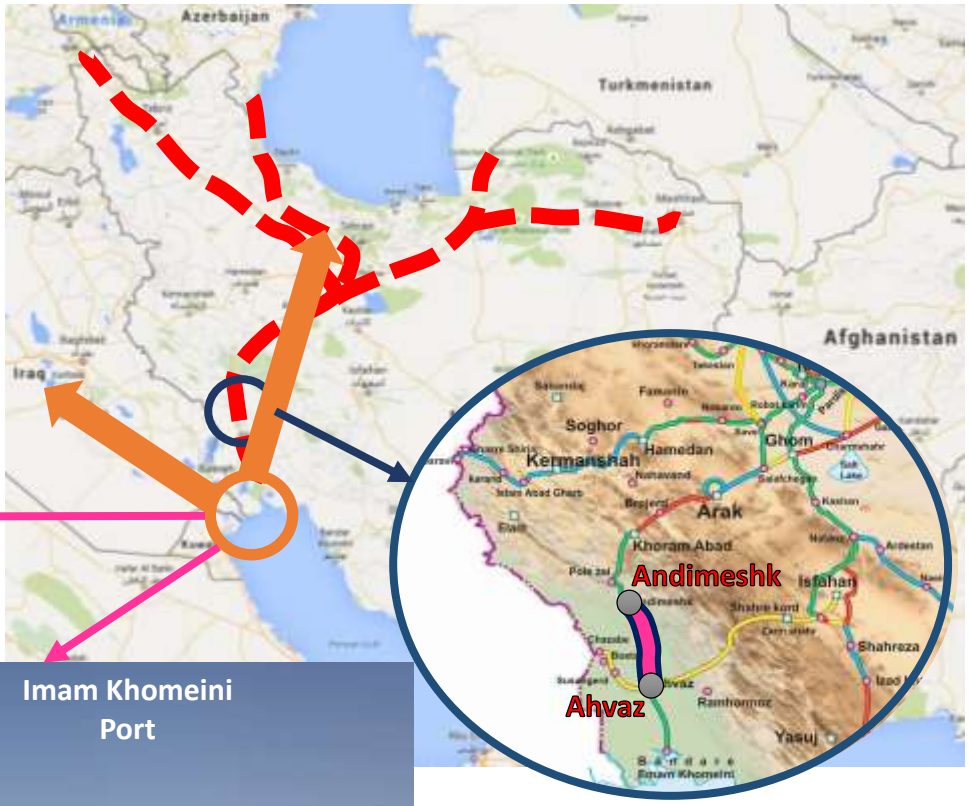
FREEWAYS NETWORK		
No.	Freeways State	Length(Km)
1	Freeways in operation (346 km. before partnership law approved) Before Islamic Republic of Iran(1995/84 km. after partnership law approved) During Islamic Republic of Iran	2341.84
2	Freeways under construction	973.75
3	Freeways study & investment opportunities	4272
4	Freeways study & network development	2869
	Total sum	10456.59

1 Andimeshk- Ahvaz Freeway

Andimeshk - Ahwaz Freeway

Project Information

Construction Length	130 Km
Location in Iran	Khuzestan Province
Location in International Transportation Corridors	• Asian Highway-Route 8 • Euro Asian Transport Link-Road Route 6
Study Status	• Under Study

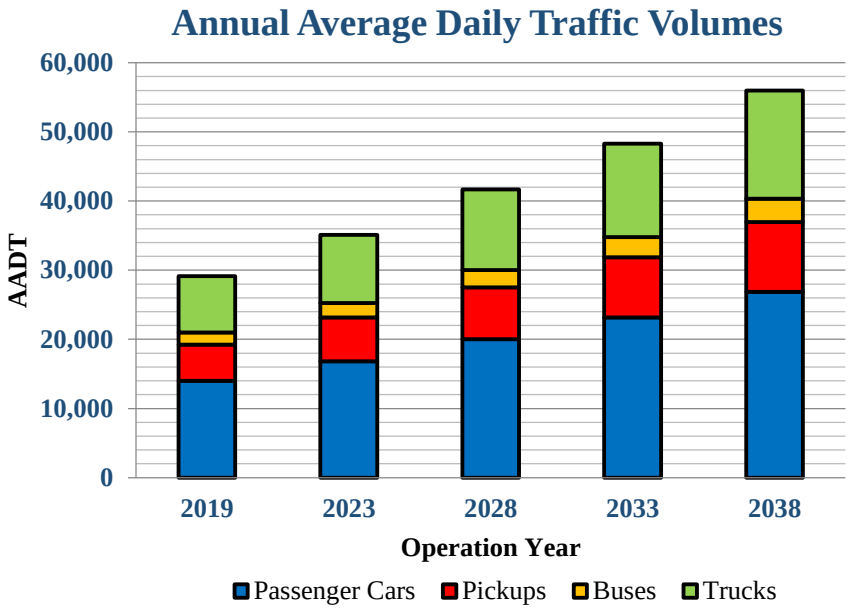


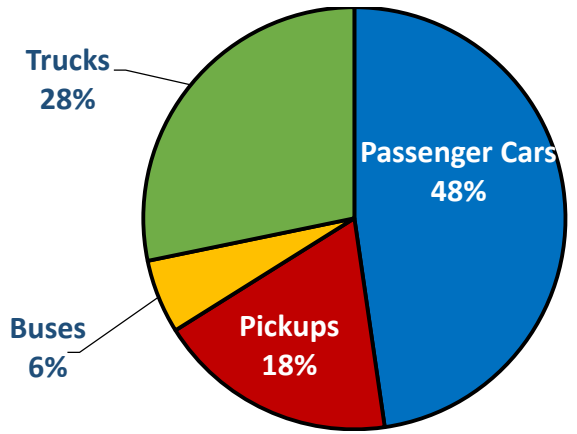
Andimeshk - Ahwaz Freeway

Technical Information*

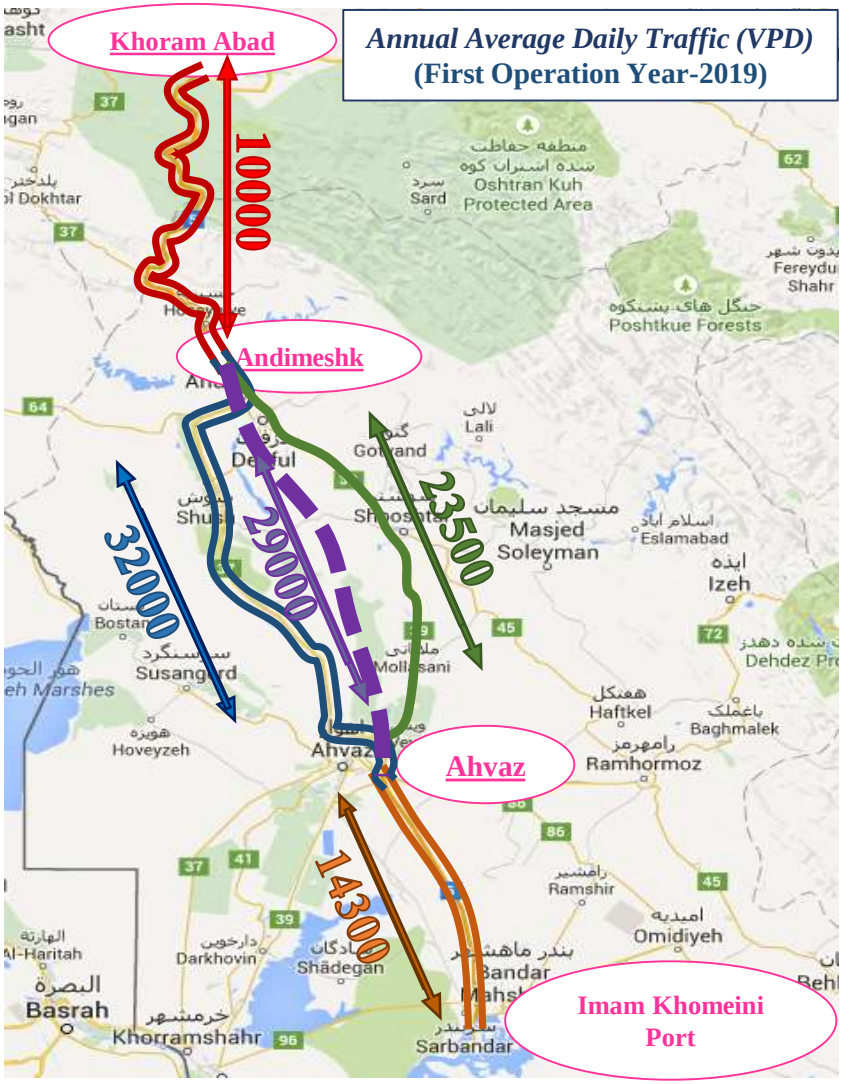
Design Speed	120 Km/h
Number of Lanes	4 Lanes (Extendable to 6 Lanes)
Minimum Horizontal Curve Radius	750 m
Maximum Profile Slope	4%
Number & Length of Bridges	13 Special Bridges- Total Length: 1200m
Number & length of Tunnels	-
Topography	Flat: 122 Km , Hills: 8 Km , Mountains: 0 Km
Traffic Volume (AADT)	First Operation Year: 29,000 VPD
	20th Operation Year: 56,000 VPD
Investment Period	Beginning Investment Year: 2016
	Construction Period: 3 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

***These are the first estimation of the project in the pessimistic situations.**





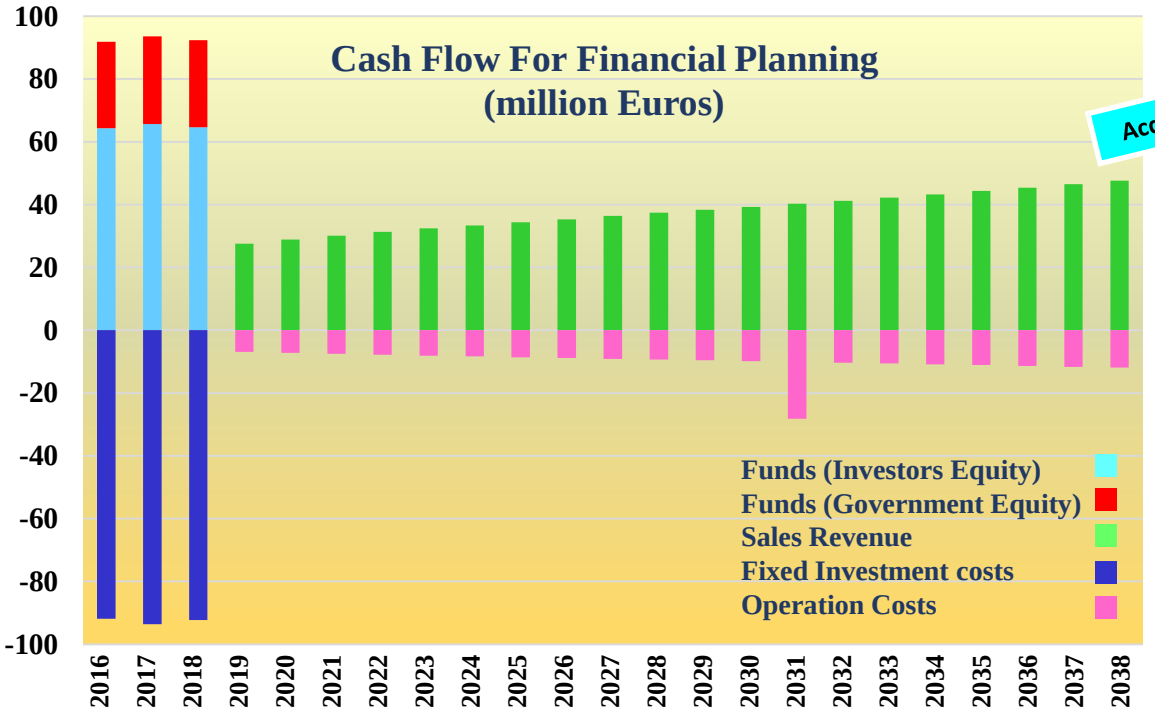
Andimeshk - Ahwaz Freeway

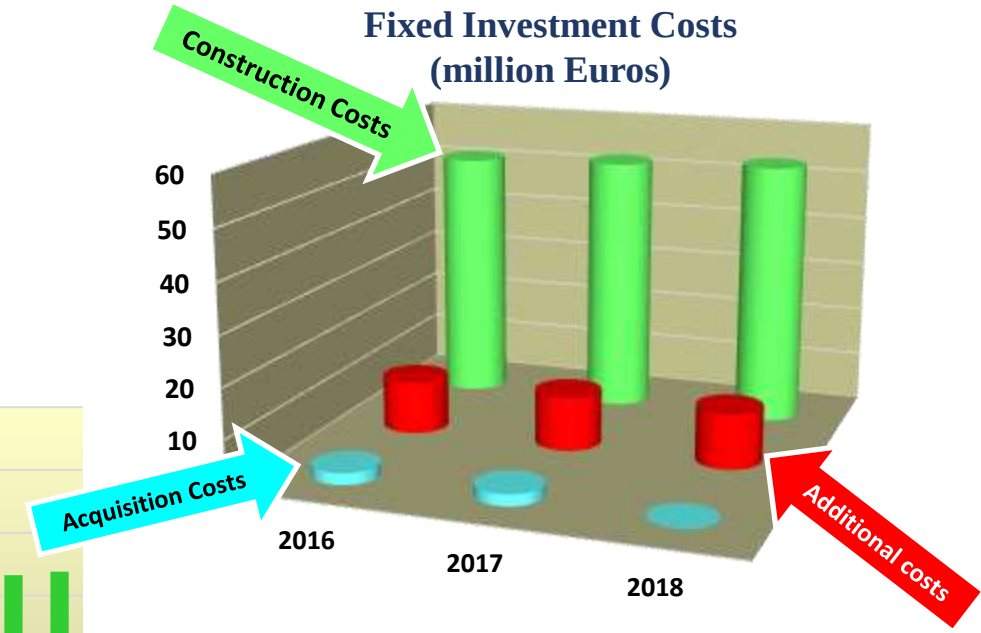


Andimeshk - Ahwaz Freeway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Iran Ministry of Petroleum legal and general supports Provincial facilitator supports





Financial Parameters*

PPP Method	BOT
Fixed Investment Cost	€278 million
Government partnership	30%
NPV @ 6.5%	€65 million
IRR (Project)	10%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**

2 Ghom- Salafchegan- Arak Freeway

Ghom- Salafchegan- Arak Freeway

Project Information

Construction Length	120 km
Location in Iran	Markazi & Ghom Provinces
Location in International Transportation Corridors	• Asian Highway-Route 8 • Euro Asian Transport Link-Road Route 6

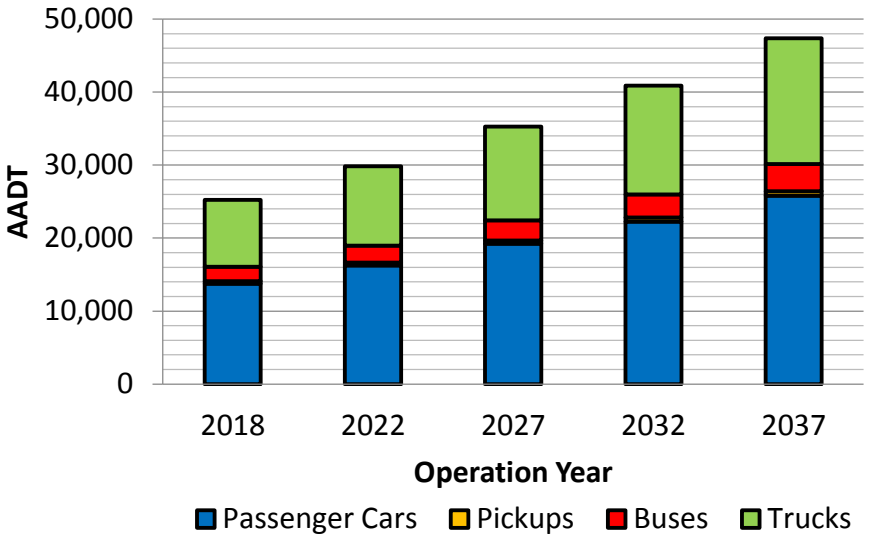
Ghom- Salafchegan- Arak Freeway

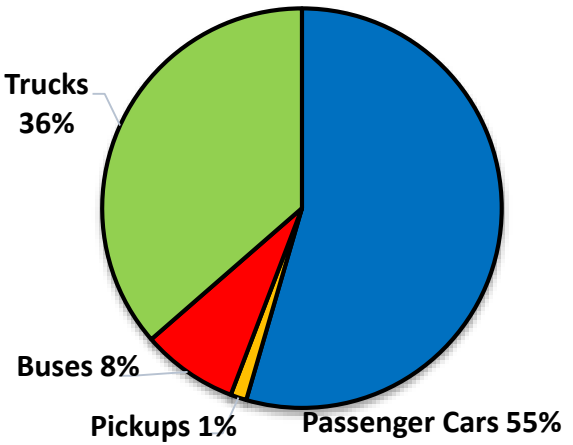
Technical Information*

Design Speed	130 Km/h
Number of Lanes	4 Lanes
Minimum Horizontal Curve Radius	1000 m
Maximum Profile Slope	4%
Number & Length of Bridges	3 Special Bridges- Total Length: 0.6 km
Number & length of Tunnels	-
Topography	Flat: 84 Km , Hills: 22 Km , Mountains: 14 Km
Traffic Volume (AADT)	First Operation Year: 25,000 VPD
	20th Operation Year: 48,000 VPD
Investment Period	Beginning Investment Year: 2016
	Construction Period: 2 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

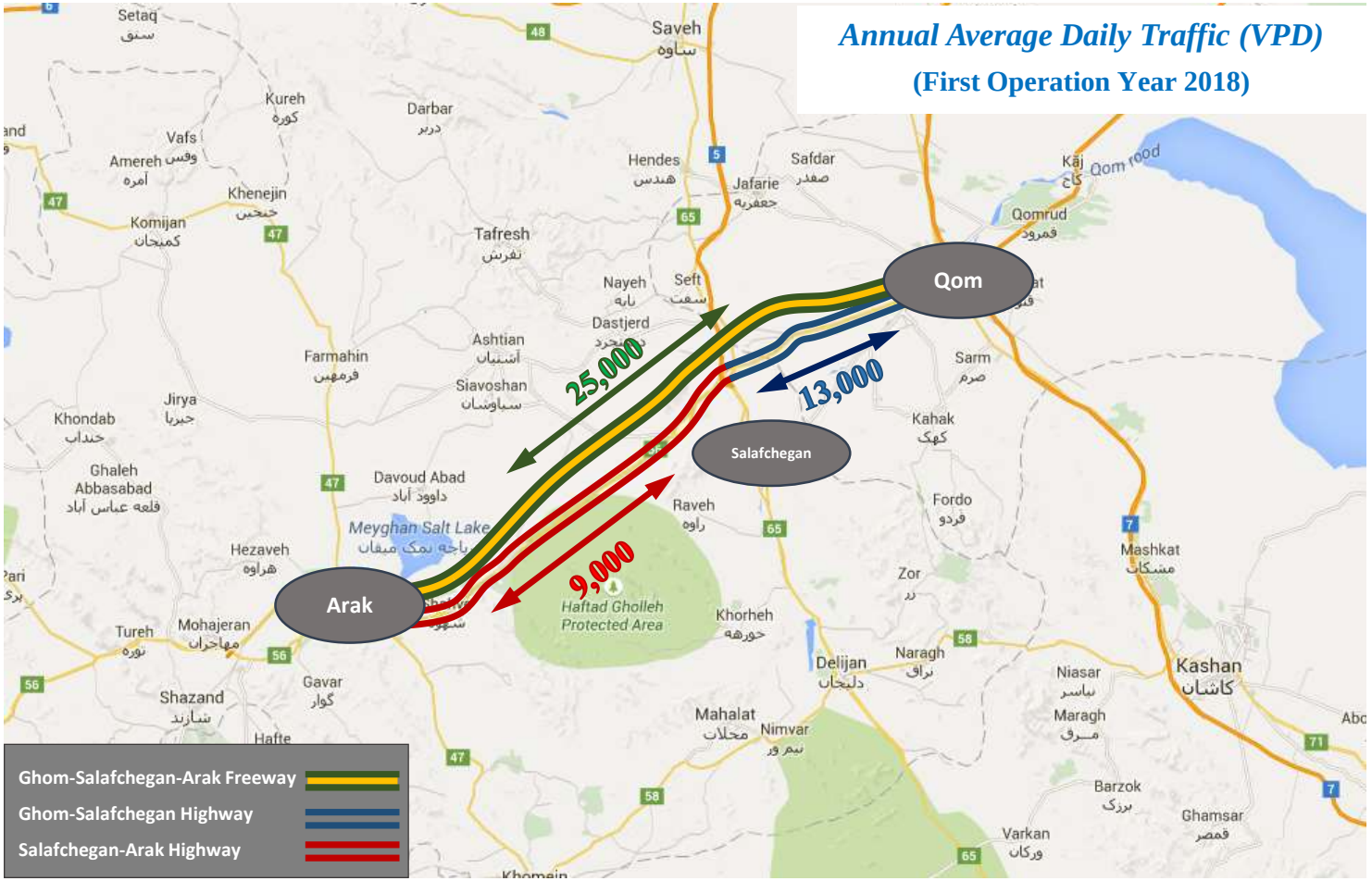
***These are the first estimation of the project in the pessimistic situations.**

Annual Average Daily Traffic Volumes





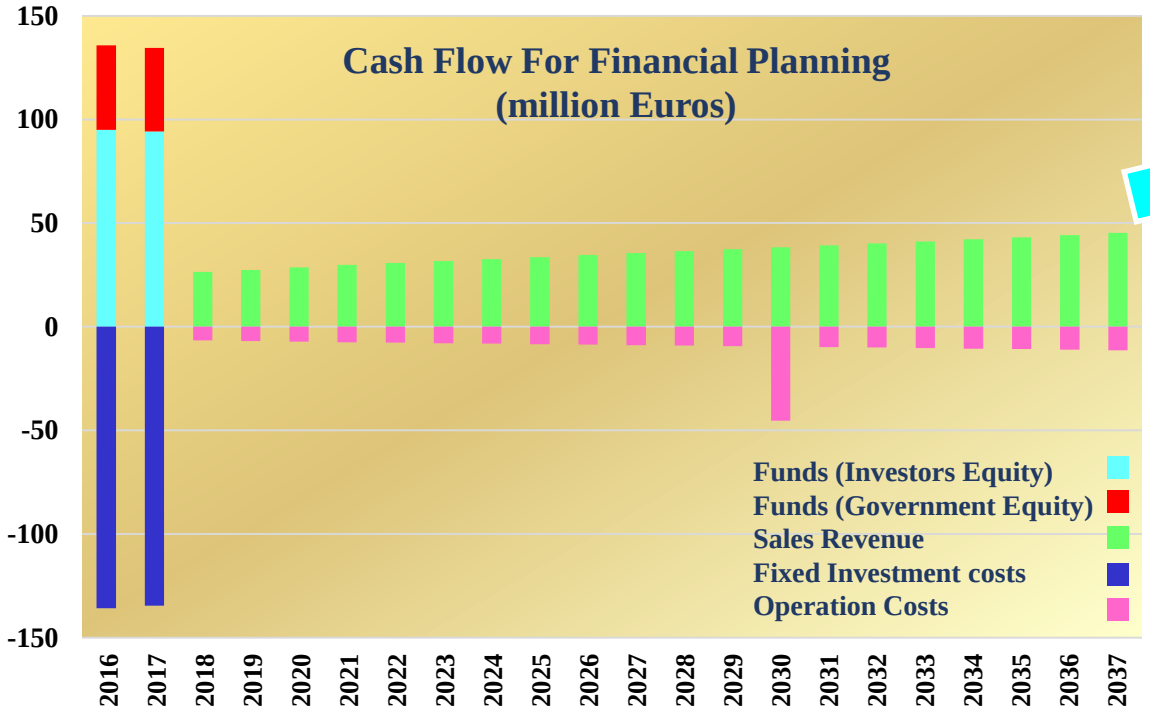
Ghom- Salafchegan- Arak Freeway

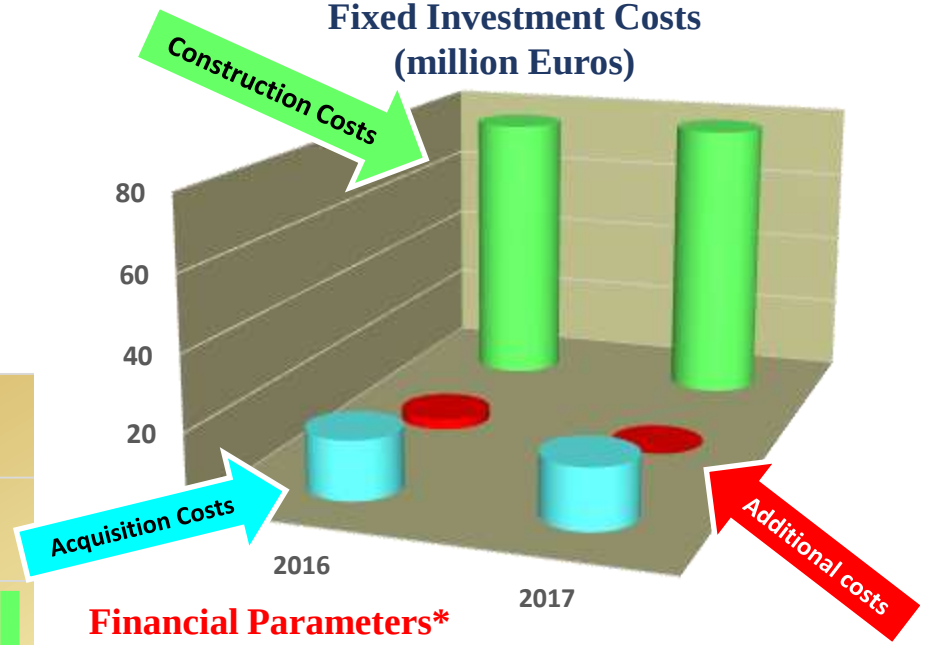


Ghom- Salafchegan- Arak Freeway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Foreign Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Provincial facilitator supports





Financial Parameters*

PPP Method	BOT
Fixed Investment Cost	€270 million
Government partnership	30%
NPV @ 6.5%	€61 million
IRR (Project)	10%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

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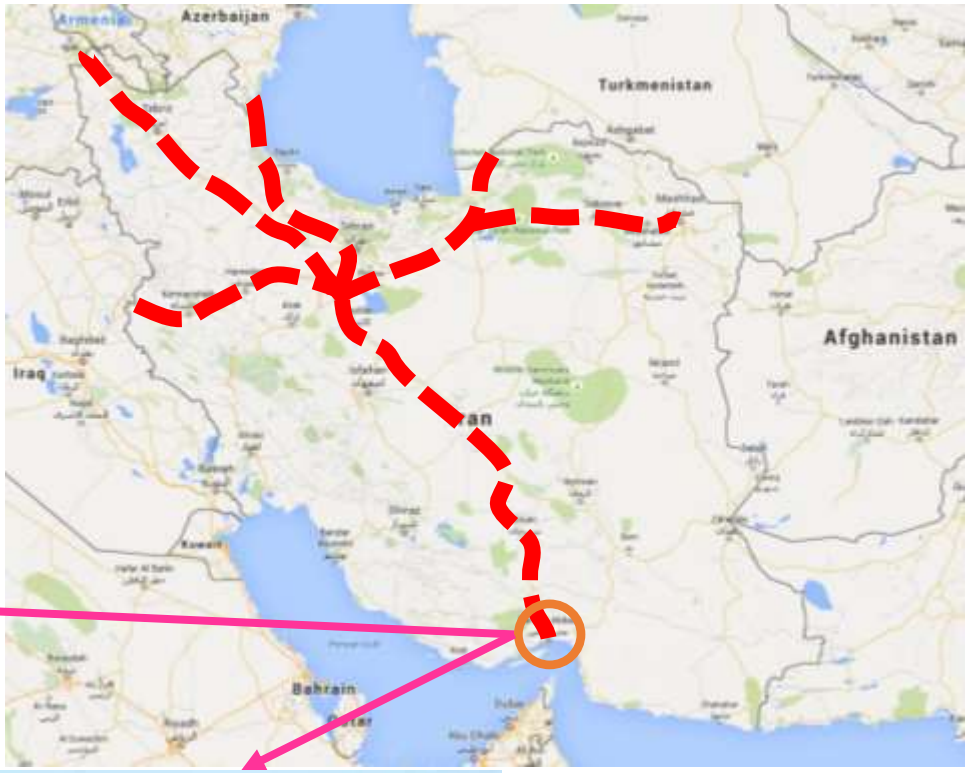
3 Sirjan- Bandar Abbas Freeway

Sirjan- Bandar Abbas Freeway

Project Information

Construction Length	355 Km
Location in Iran	Hormozgan & Kerman Provinces
Location in International Transportation Corridors	•Asian Highway-Route 70 •Euro Asian Transport Link-Road Route 6
Study Status	•Under Study



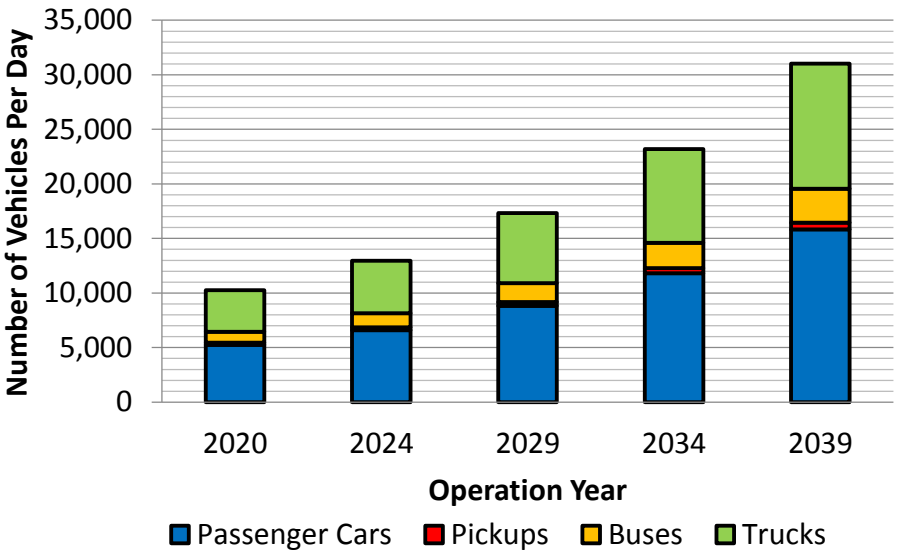
Sirjan- Bandar Abbas Freeway

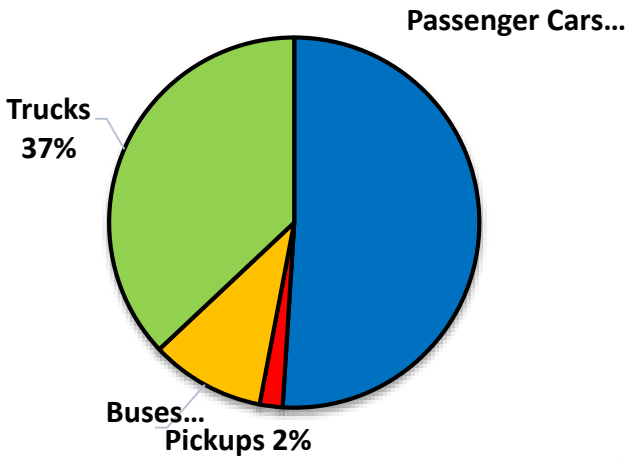
Technical Information*

Design Speed	120 Km/h
Number of Lanes	6 Lanes
Minimum Horizontal Curve Radius	750 m
Maximum Profile Slope	6%
Number & Length of Bridges	59 Special Bridges- Total Length: 6750 m
Number & length of Tunnels	17 Tunnels- Total Length: 9050 m
Topography	Flat: 177 Km , Hills: 89 Km , Mountains: 89 Km
Traffic Volume	First Operation Year: 10,000 VPD (AADT)
	20th Operation Year: 31,000 VPD (AADT)
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

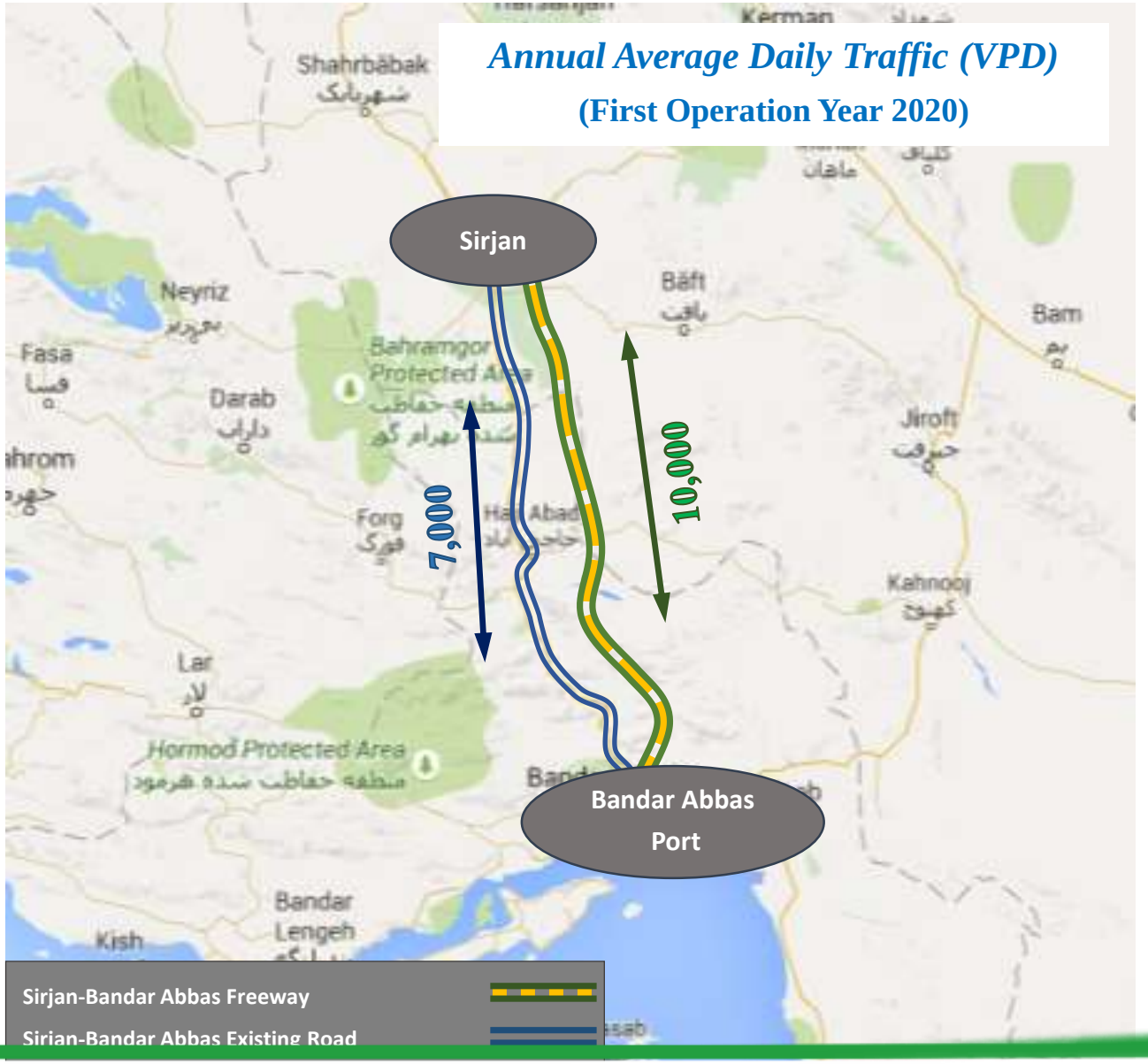
***These are the first estimation of the project in the pessimistic situations.**

Annual Average Daily Traffic Volumes





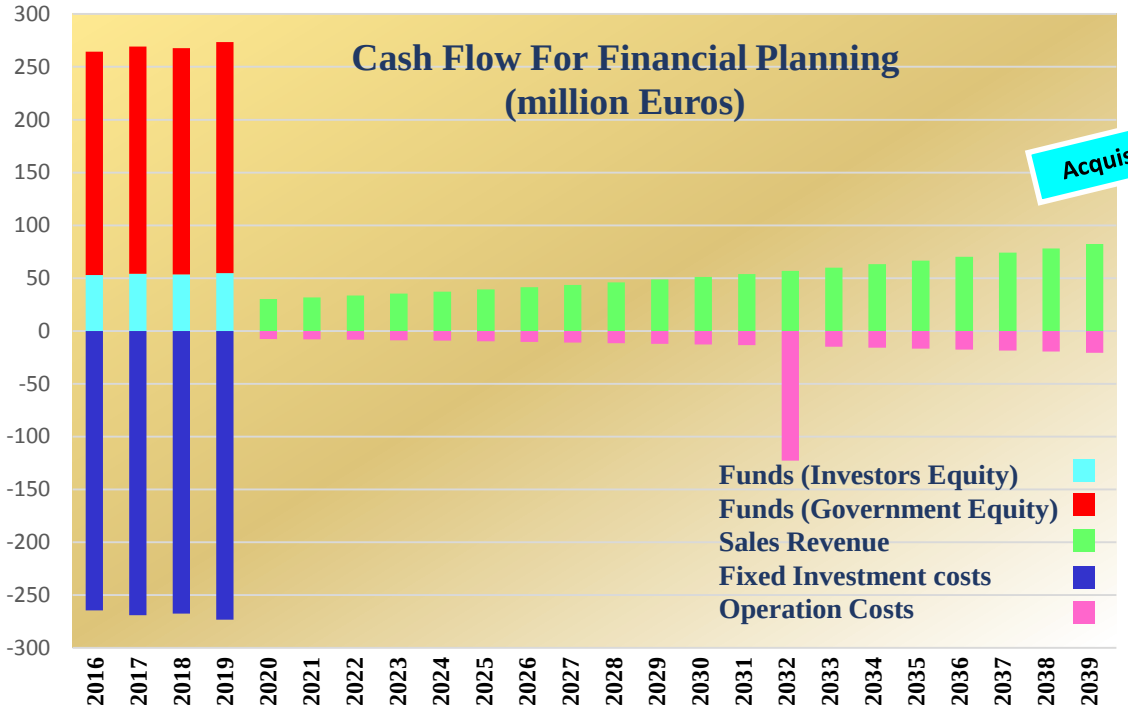
Sirjan- Bandar Abbas Freeway



Sirjan- Bandar Abbas Freeway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Foreign Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Iran Ministry of Petroleum legal and general supports Provincial facilitator supports



Financial Parameters*

PPP Method	BOT
Fixed Investment Cost	€1075 million
Government partnership	80%
NPV @ 6.5%	€80 million
IRR (Project)	10%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

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4 Shiraz- Bushehr Freeway

Shiraz- Bushehr Freeway

Project Information

Construction Length	220 Km
Location in Iran	Bushehr & Fars Provinces
Location in International Transportation Corridors	Asian Highway-Route 72 Euro Asian Transport Link-Road Route 6

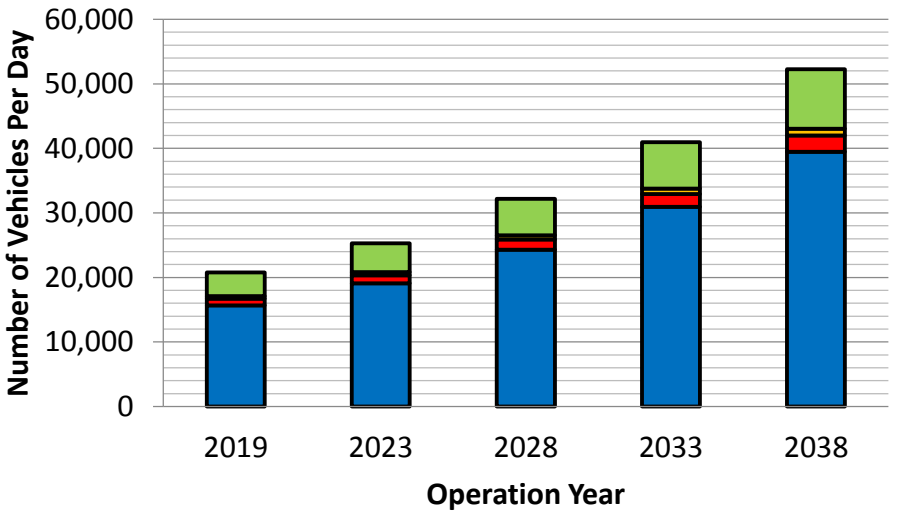
Shiraz- Bushehr Freeway

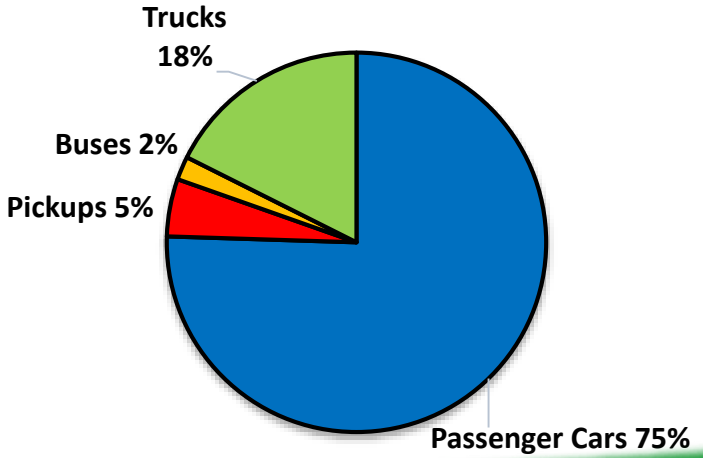
Technical Information*

Design Speed	120 Km/h
Number of Lanes	4 Lanes
Minimum Horizontal Curve Radius	750 m
Maximum Profile Slope	6%
Number & Length of Bridges	16 Special Bridges - Total Length: 1750 m
Number & length of Tunnels	11 Tunnels- Total Length: 9600 m
Topography	Flat: 90 Km , Hills: 27 Km , Mountains: 103 Km
Traffic Volume (AADT)	First Operation Year: 21,000 VPD
	20th Operation Year: 52,000 VPD
Investment Period	Beginning Investment Year: 2016
	Construction Period: 3 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

***These are the first estimation of the project in the pessimistic situations.**

Annual Average Daily Traffic Volumes

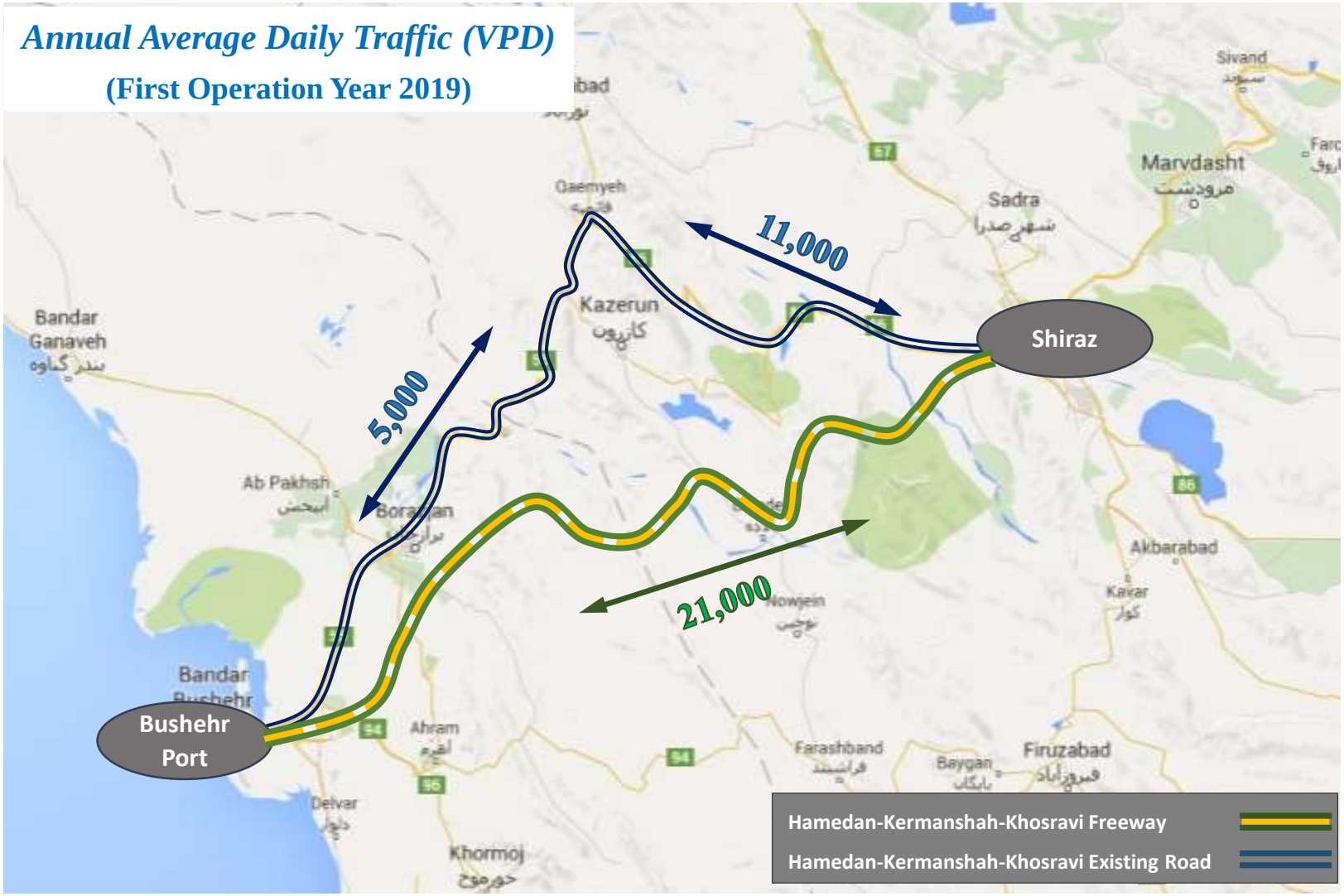




Shiraz- Bushehr Freeway

Annual Average Daily Traffic (VPD)

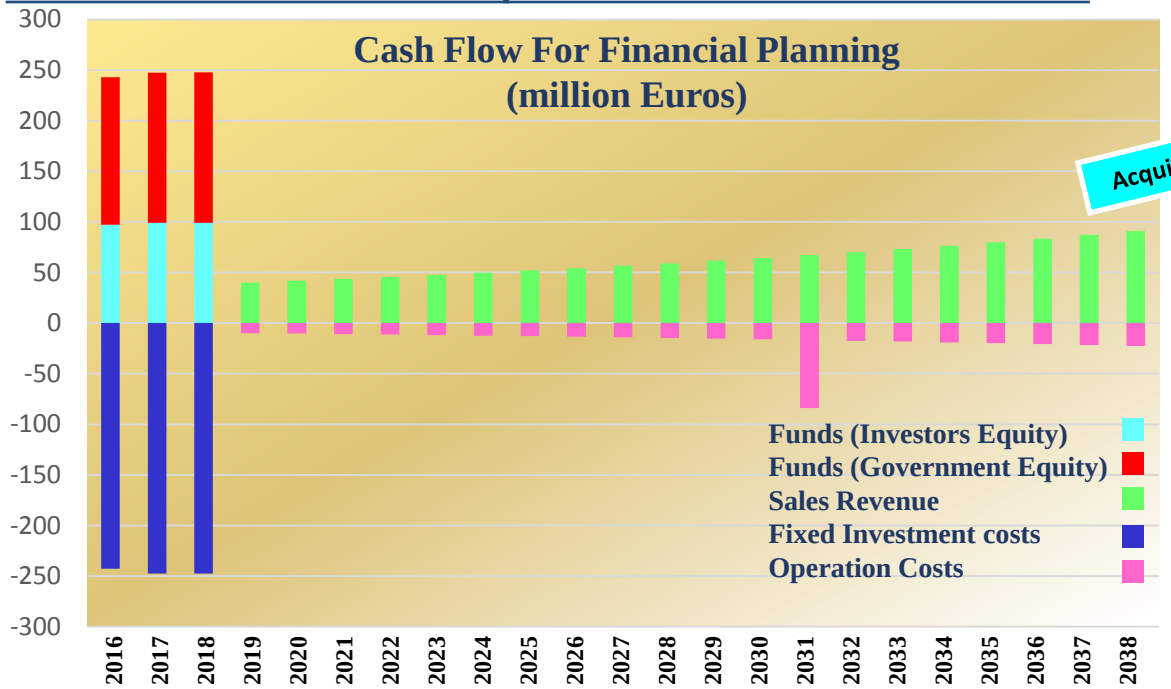
(First Operation Year 2019)

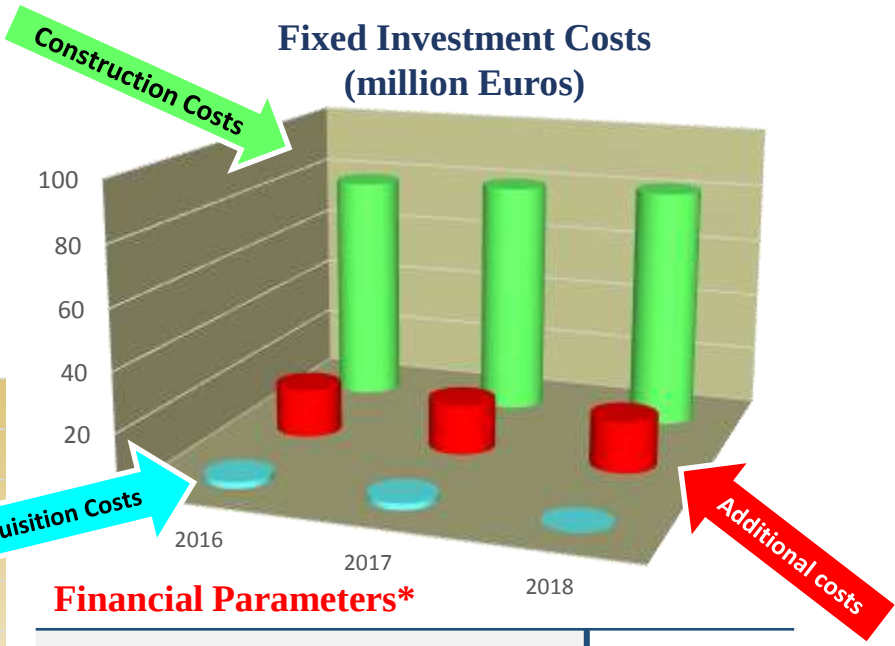


Shiraz- Bushehr Freeway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Foreign Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Iran Ministry of Petroleum legal and general supports Provincial facilitator supports





Financial Parameters*

PPP Method	BOT
Fixed Investment Cost	€738 million
Government partnership	60%
NPV @ 6.5%	€104 million
IRR (Project)	10%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

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5 Hamedan- Kermanshah Freeway

Hamedan- Kermanshah Freeway

Project Information

Construction Length	180 Km
Location in Iran	Hamedan & Kermanshah Province
Location in International Transportation Corridors	•Asian Highway-Route 2

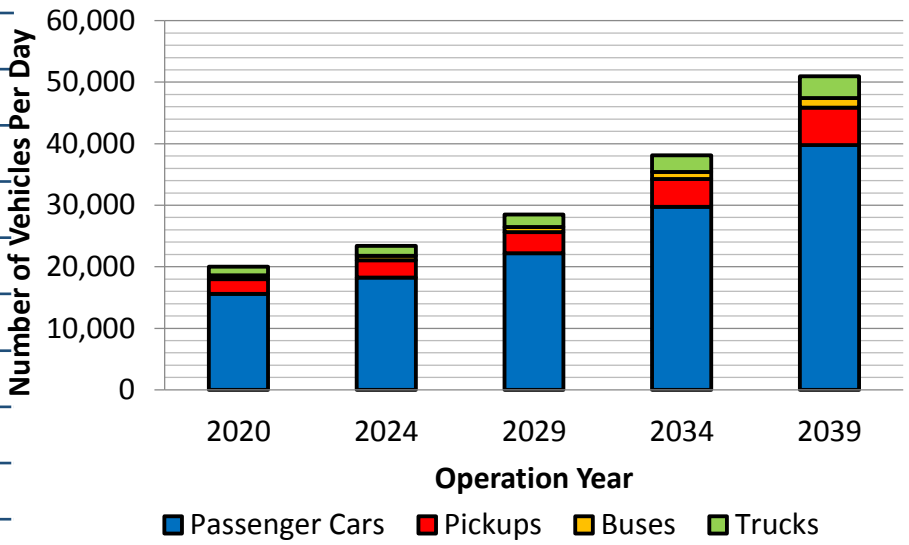
Hamedan- Kermanshah Freeway

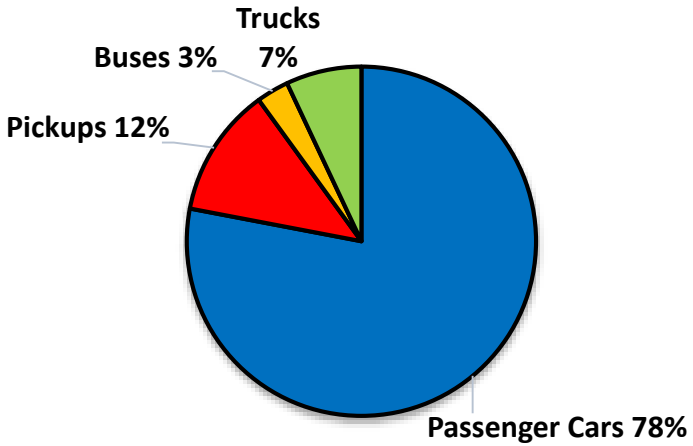
Technical Information*

Design Speed	120 Km/h
Number of Lanes	4 Lanes
Minimum Horizontal Curve Radius	750 m
Maximum Profile Slope	6%
Number & Length of Bridges	8 Special Bridges- Total Length: 1500 m
Number & length of Tunnels	6 Tunnels- Total Length: 6200 m
Topography	Flat: 50 Km , Hills: 65 Km , Mountains: 65 Km
Traffic Volume (AADT)	First Operation Year: 20,000 VPD
	20th Operation Year: 50,000 VPD
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

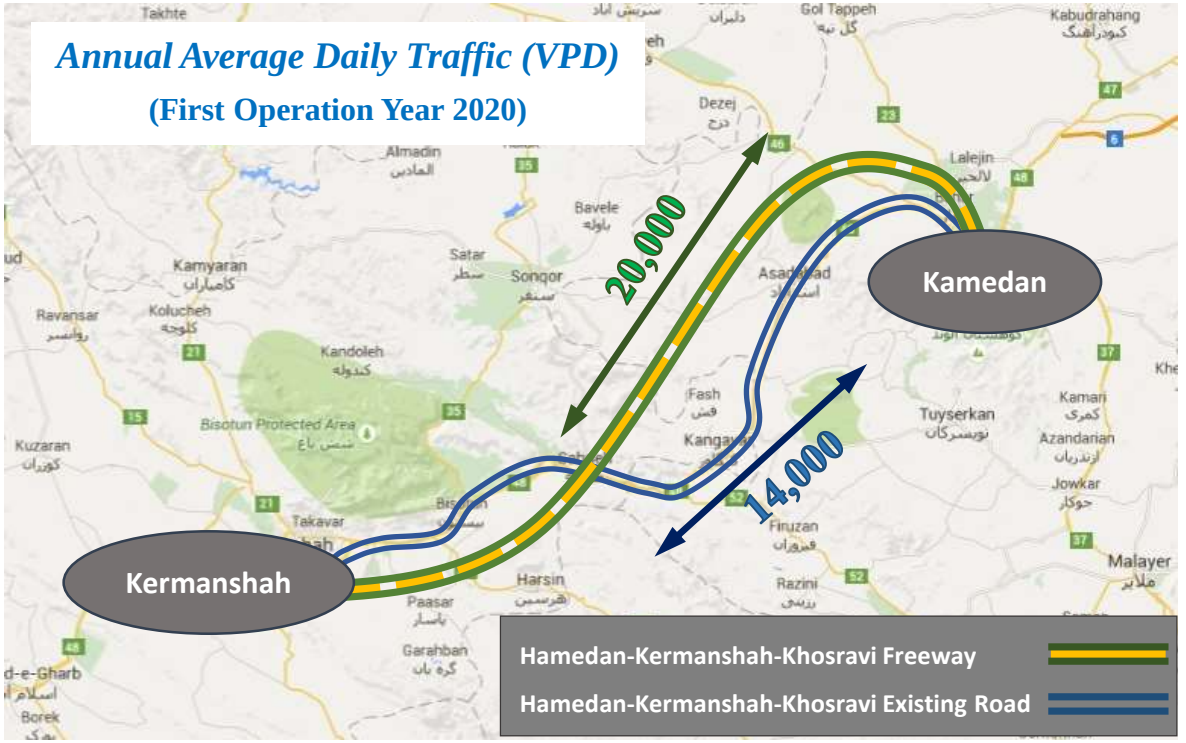
***These are the first estimation of the project in the pessimistic situations.**

Annual Average Daily Traffic Volumes





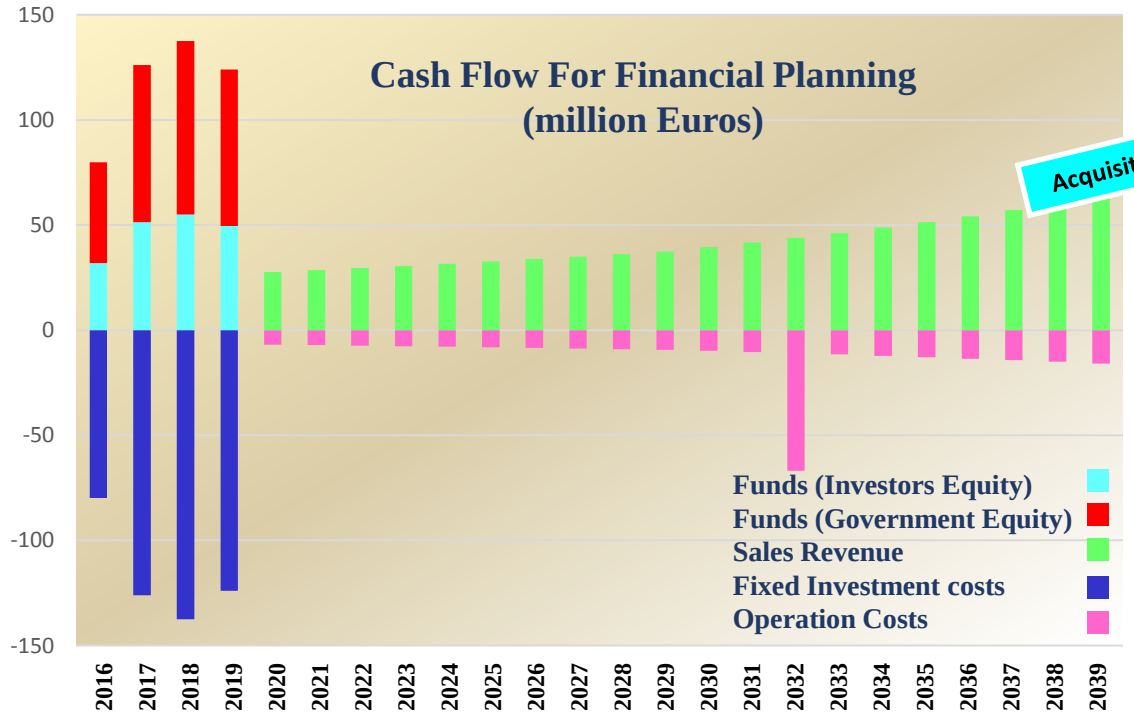
Hamedan- Kermanshah Freeway

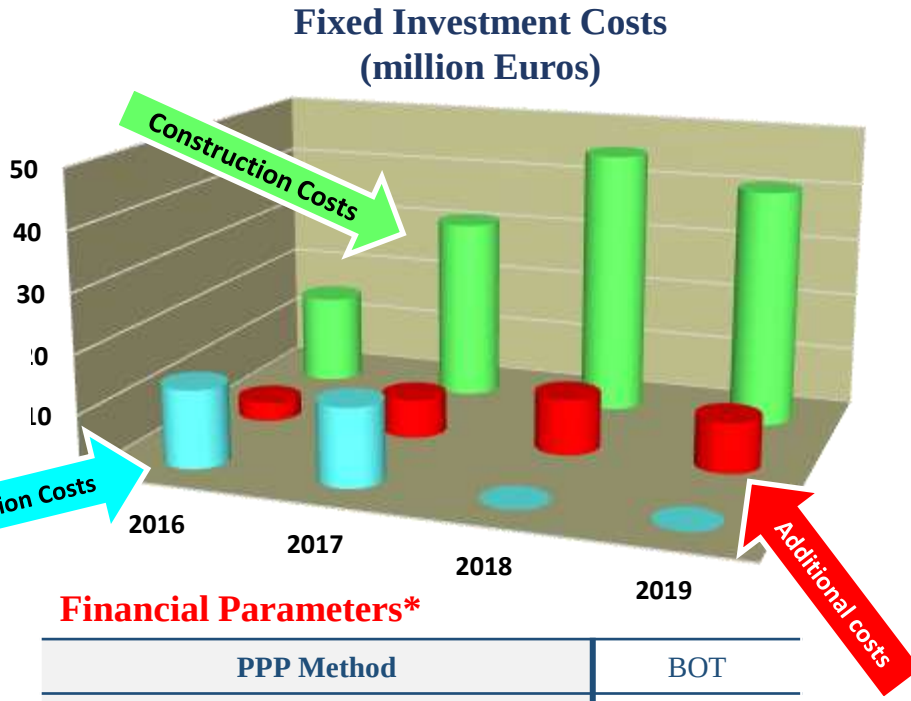


Hamedan- Kermanshah Freeway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Foreign Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Provincial facilitator supports





Financial Parameters*

PPP Method	BOT
Fixed Investment Cost	€470 million
Government partnership	60%
NPV @ 6.5%	€65 million
IRR (Project)	10%
MRRR (Minimum required rate of return)	6.5%

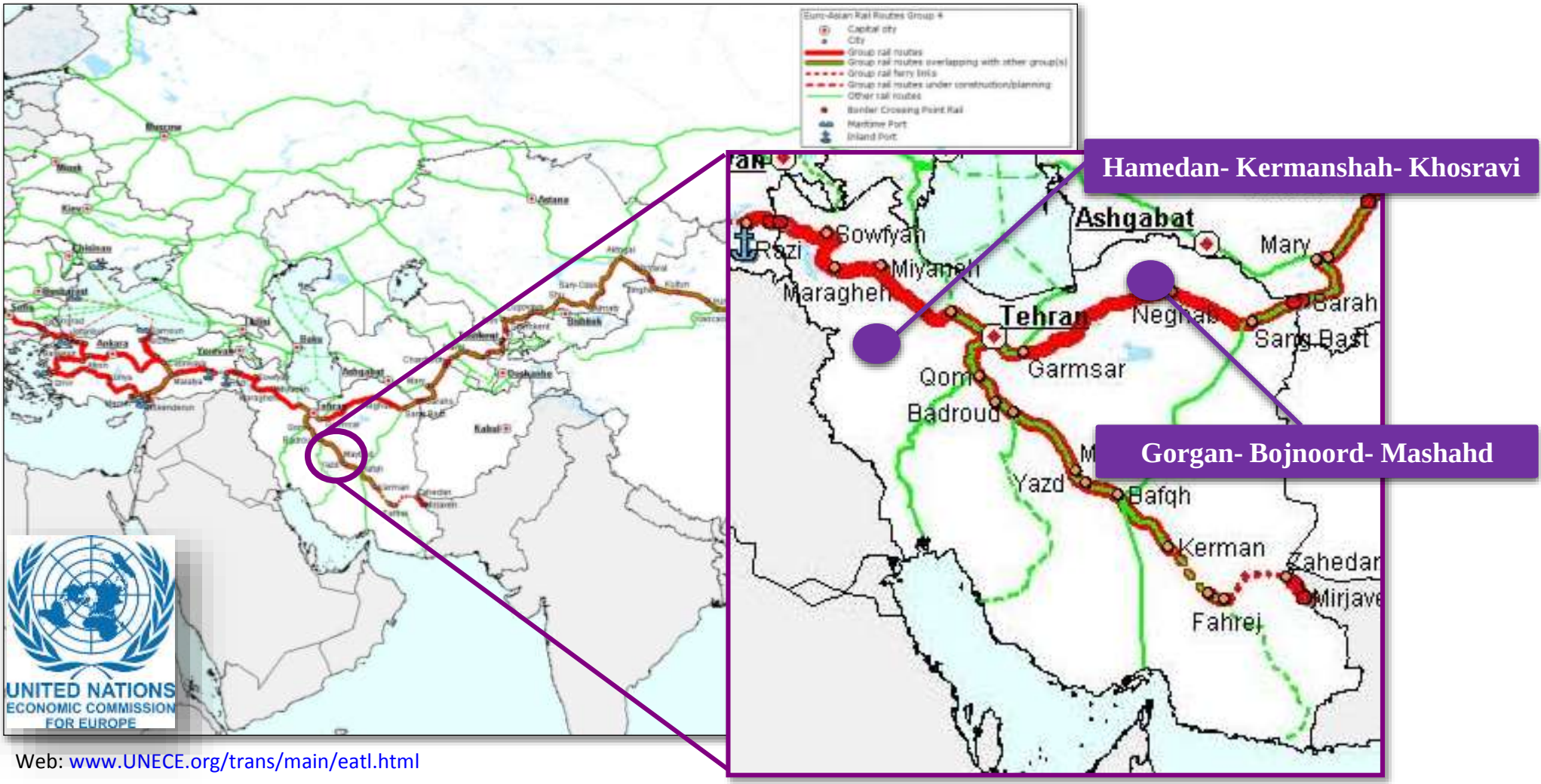
Exchange rate (in 2015): 40000Rials = 1Euros

***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**

Railway Investment Opportunities

Inter-regional Railway Corridors

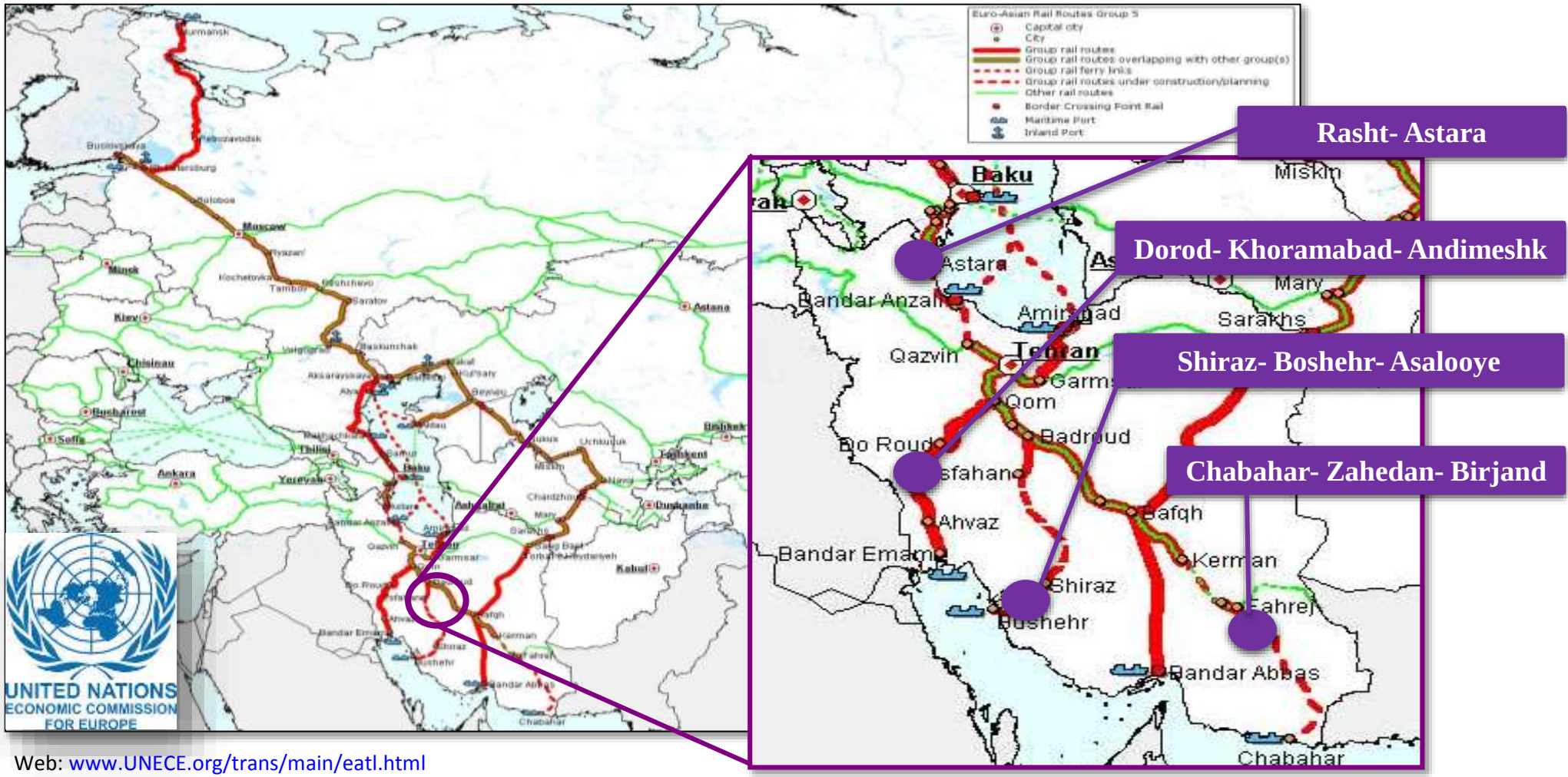
Euro-Asian Transport Links – Rail Routes 4



Web: www.UNECE.org/trans/main/eatl.html

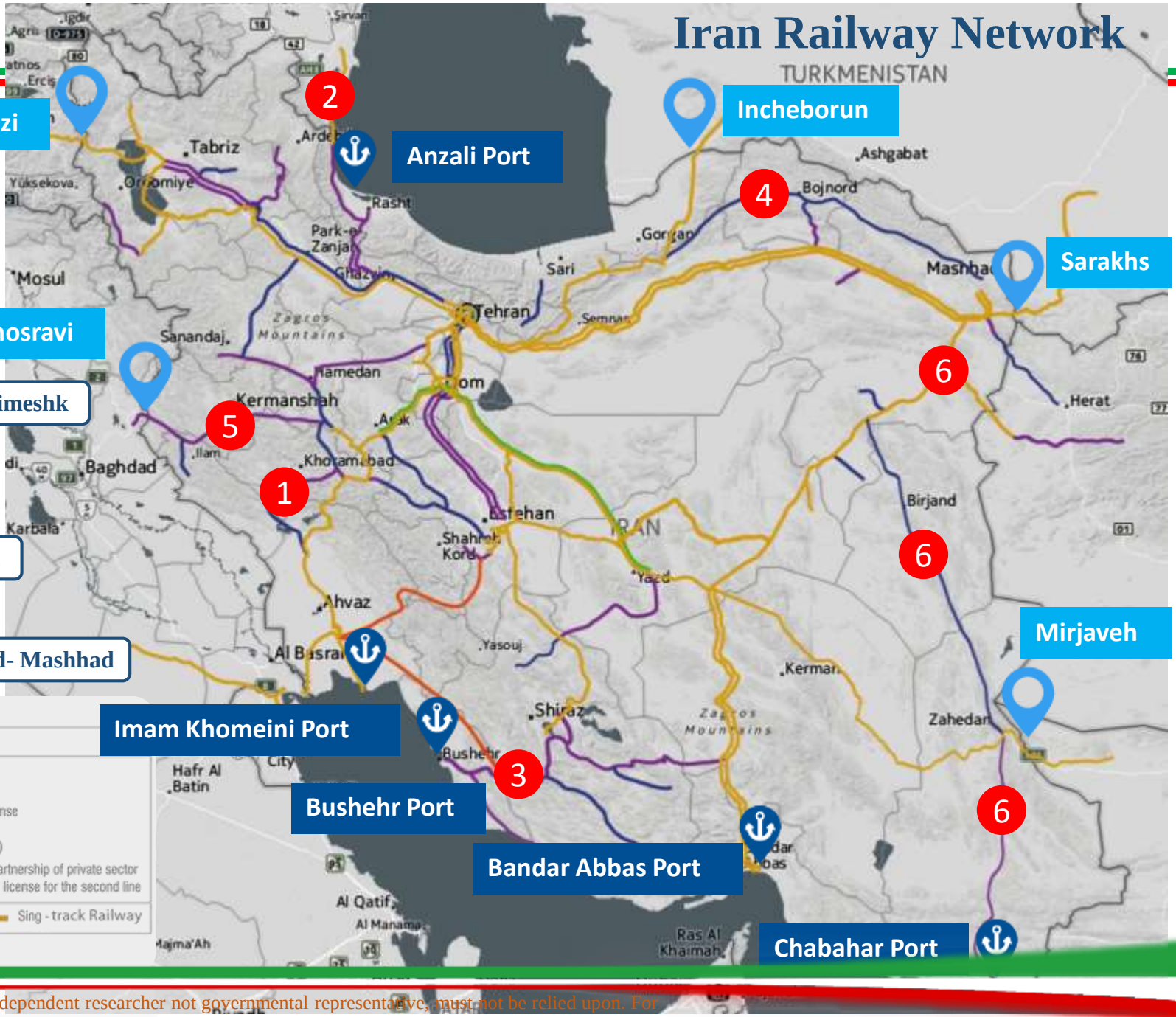
Inter-regional Railway Corridors

Euro-Asian Transport Links – Rail Routes 5



Web: www.UNECE.org/trans/main/eatl.html

Iran Railway Network

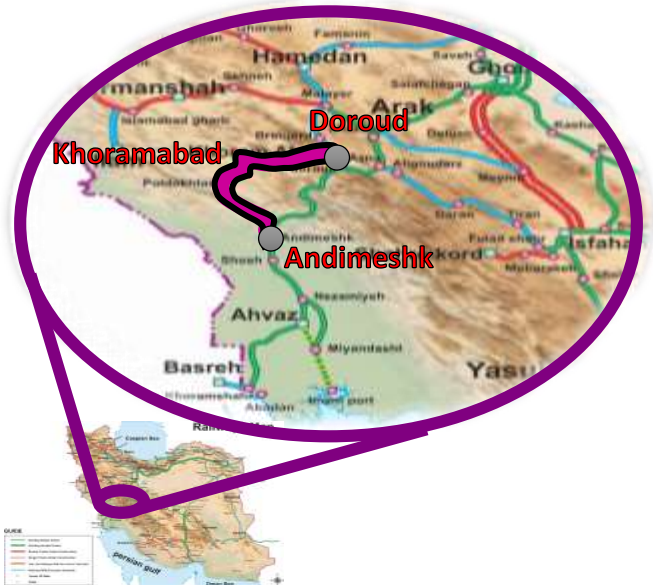


Investment opportunities of Freeway

1. 1-Doroud- Khoram Abad- Andimeshk
2. 2- Rasht- Astara
3. 3- Shiraz- Bushehr- Asaluyeh
4. 4- Gorgan- Bojnurd- Mashhad
5. 5- Kermanshah- Khosravi
6. 6- Chabahar- Zahedan- Birjand- Mashhad

1 Doroud- Khoranabad- Andimeshk Railway

Doroud- Khoranabad- Andimeshk Railway



Motivator aspects to Start up Construction

- Removing bottlenecks of south route as the nearest center rail route of Iran to Persian Gulf
- The cover of KhorramAbad area with mines & various industries
- Increasing rail capacity of route for passage of materials related to Khuzestan Steel Complex
- Increasing capacity of Imam Khomeini's port
- Increasing transit capacity of south route

Project Information

Construction Length	339 Km
Capacity	8.5 million ton/year
Location in Iran	Provinces of Khouzestan & Lorestan
International Location	• EATL Rail Routes 5
Topography	• Flat: 130Km, Hills: 164 Km, Mountains: 45 Km
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

Technical Information

Design Speed	160 Km/h For Passenger –120 Km/h For Cargo
Number of Lanes	Single Track
Minimum Horizontal Curve Radius	500 m
Maximum Profile Slope	1.5%
Number & Length of Bridges	68 SB- Total length: 5.9 km
Number & length of Tunnels	46 T- Total length: 29.5 km
Passenger Traffic Volume	First Operation Year: 0.62 million Passenger
Cargo Traffic Volume	First Operation Year: 6.7 million ton

Doroud-KhorramAbad-Andimeshk Railway

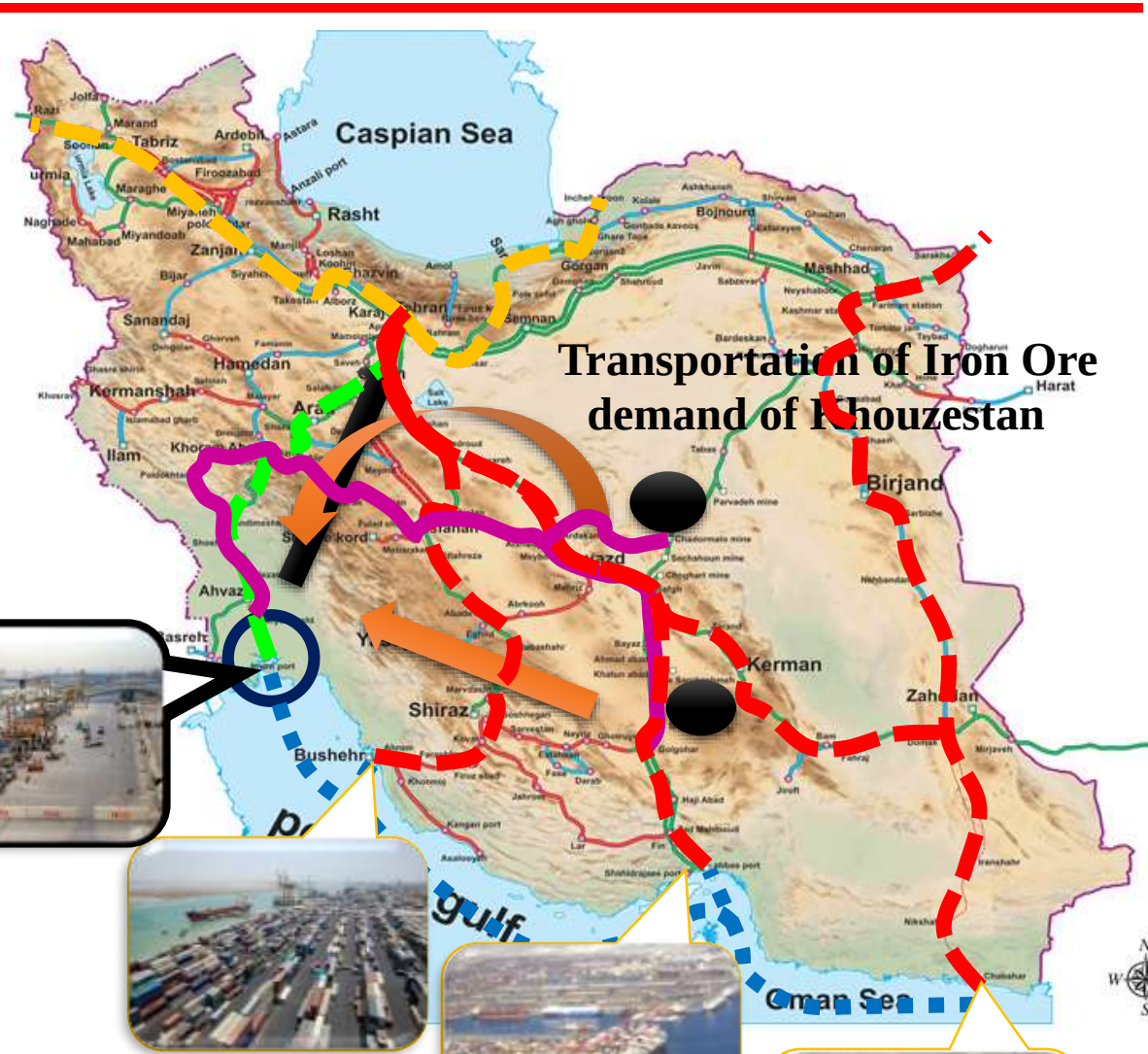
The distance from Chabahar to other ports

City	Chabahar	Bandar Abbas	Bandar Imam Khomeini	Boushehr
Tehran	1961	1483	927	1496
Esfahan	1584	935	1115	948
Gol-e Gohar	1089	310	1741	1654
Chador- Malu	986	763	1349	1375
Choghart	853	630	1454	1367
Sarakhs	1832	1596	1980	2333
Astara	2457	2022	1466	2035
Razi	3010	2445	1889	2458

Bandar Imam Khomeini	Boushehr	Bandar Abbas
805	680	305

kilometer

New Lands: 9800 Hec.



Doroud- KhorramAbad- Andimeshk Railway

Passenger Demand*

(million passenger)

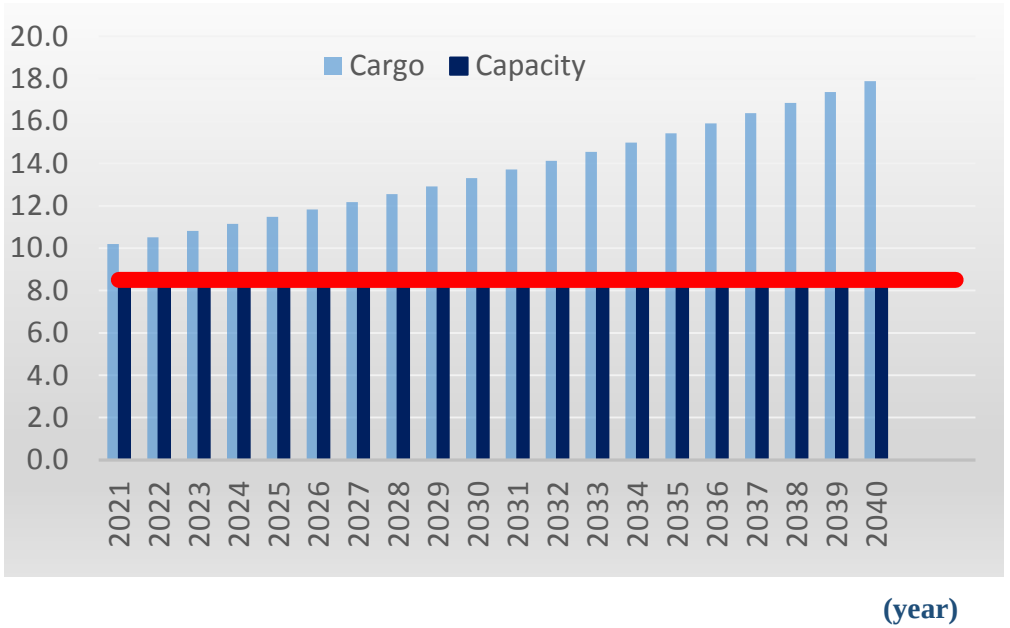
Doroud- Khorram Abad	Andimeshk- khorram Abad	Year
1.3	**0.6**	2021
1.5	**0.7**	2025
1.7	**0.9**	2030
2.0	**1.1**	2035
2.2	**1.3**	2040

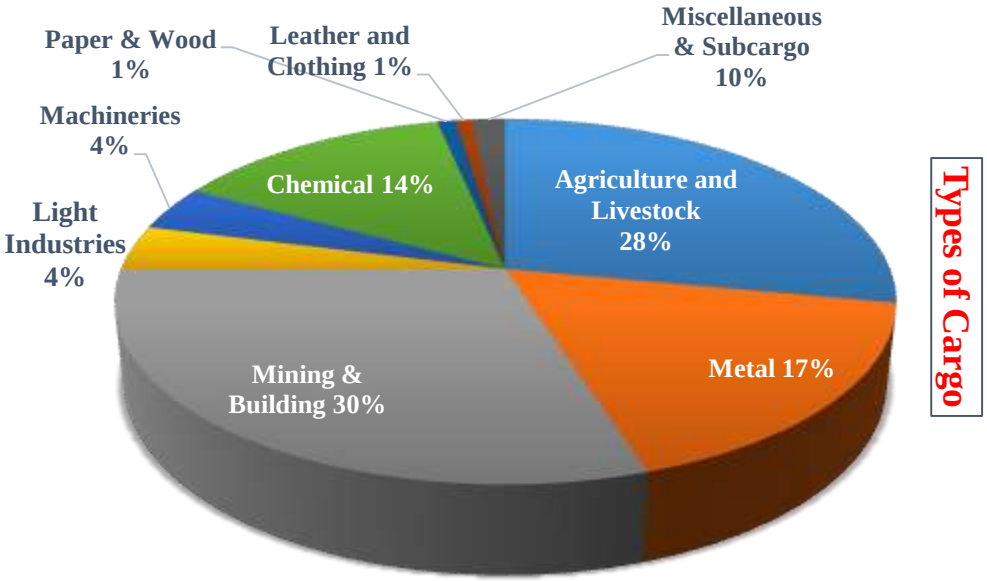
*These are the first estimation of the project in the pessimistic situations.

Cargo Demand*

(million ton)

Doroud- khorram Abad	Andimeshk- Khorram Abad	Transit	Year
7.27	**7.9**	**2.3**	2021
8.12	**8.9**	**2.6**	2025
9.32	**10.3**	**3.0**	2030
10.72	**11.9**	**3.5**	2035
11.98	**13.4**	**3.9**	2040





- The growth rate equivalent to 3% for construction period (2016- 2020)
- The growth rate equivalent to 3% for operation period (2021-2040)

Doroud- KhorramAbad- Andimeshk Railway

Estimate Equity & Credit Needs

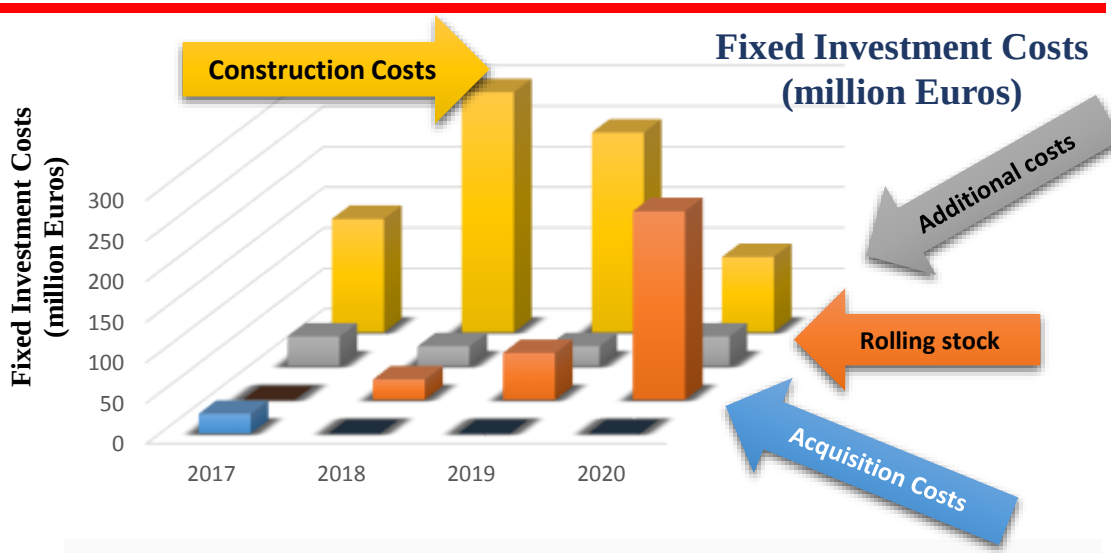
Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants

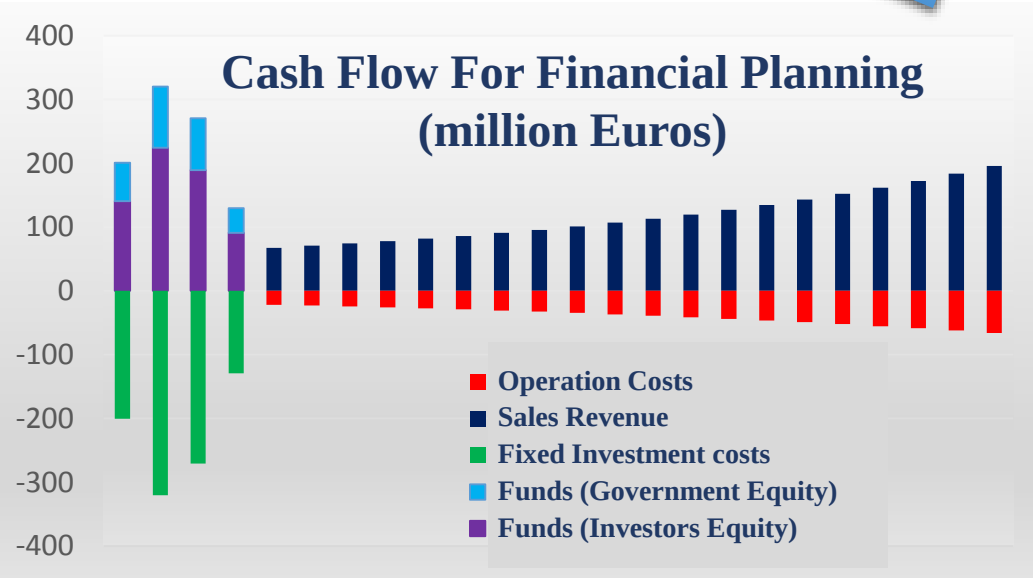
Financial Parameters*

Fixed Investment Costs	1,114 million Euro
Government partnership	30%
NPV @ 6.5%	33 million Euro
IRR (Project)	7.1%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.





***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**

2 Rasht- Astara Railway

Rasht- Astara Railway

Project Information

Construction Length	152 Km	
Capacity	6 million ton/year	
Location in Iran	Provinces of Khouzestan & Lorestan	
Location in International Transportation Corridors	• EATL Rail Routes 5	
Topography	• Flat: 120 Km, Hills: 25 Km, Mountains: 7 Km	
Investment Period	Beginning Investment Year:	2016
	Construction Period:	4 Years
	Operation Period:	20 Years
	Concession Period:	20 Years

Technical Information*

Design Speed	160 Km/h Passenger –100 Km/h Cargo
Number of Lanes	Single Track (Extendable to Double Track)
Minimum Horizontal Curve Radius	700 m
Maximum Profile Slope	1.5%
Number & Length of Bridges	675 m in total
Number & length of Tunnels	1610 m in total
Passenger Traffic Volume	First Operation Year 0.15 million person
	20th Operation Year: 0.33 million person
Cargo Traffic Volume	First Operation Year: 4.7 million ton
	20th Operation Year: 12.7 million ton

***These are the first estimation of the project in the pessimistic situations.**

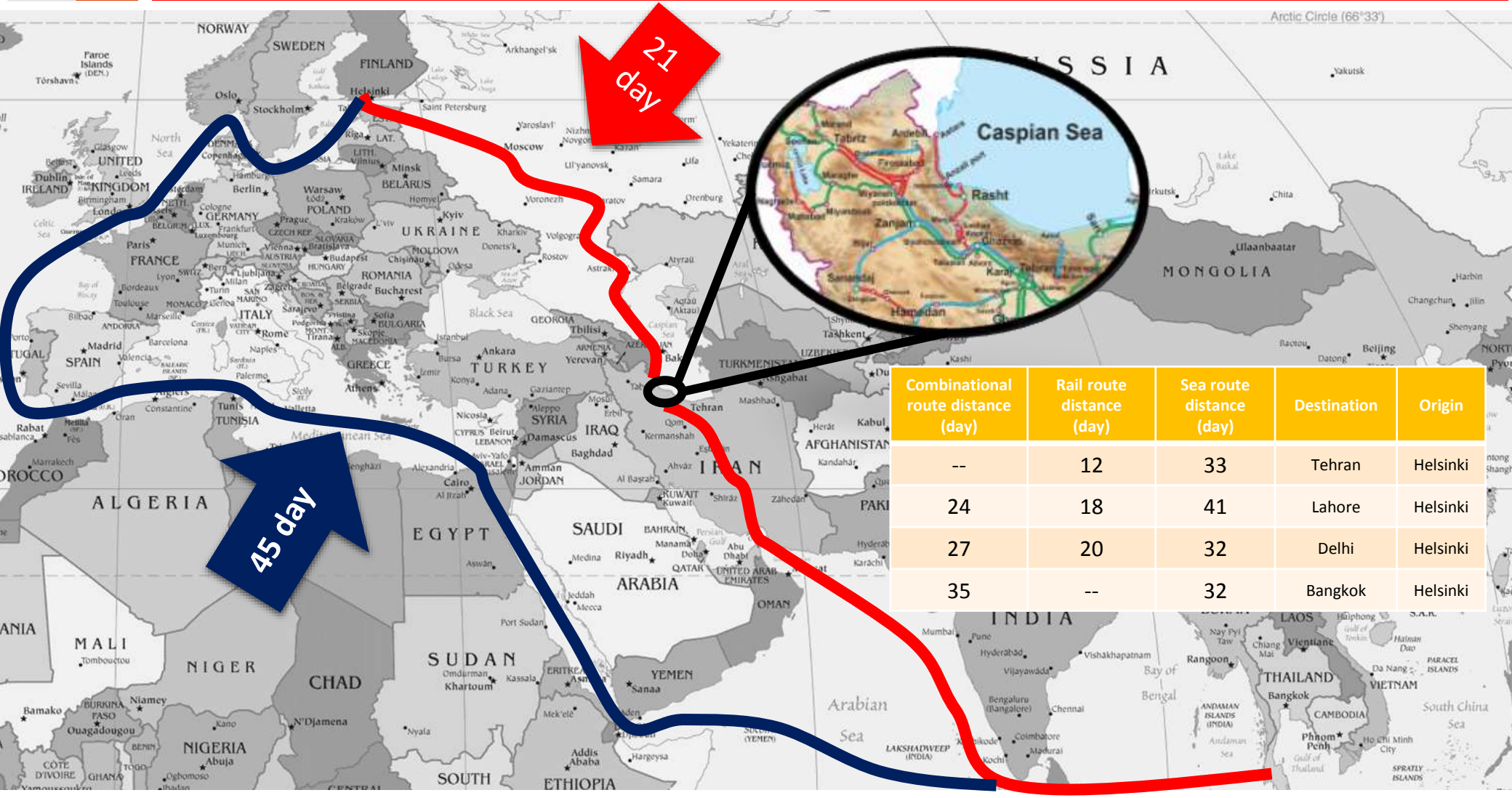
Motivator aspects to Start up Construction

Possible development of commercial & trade exchanges with middle Asia & European countries through Azerbaijan railway

Increasing power of incoming/ outgoing goods transportation

Increasing transit power from west marginal countries of Caspian gulf

Rasht-Astara Railway



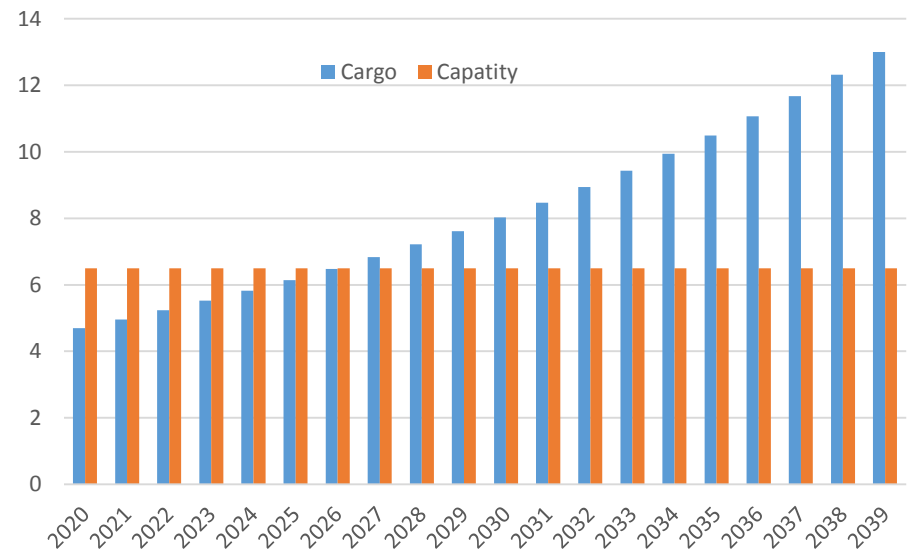
Combinational route distance (day)	Rail route distance (day)	Sea route distance (day)	Destination	Origin
--	12	33	Tehran	Helsinki
24	18	41	Lahore	Helsinki
27	20	32	Delhi	Helsinki
35	--	32	Bangkok	Helsinki

Passenger & Cargo Demand*

	Twentieth year of operation	Tenth year of operation	First year of operation
Forecasting passengers Demand(Thousand Person)	331	224	157
Forecasting amount of cargo(Thousand Ton)	12774	7585	4716

***These are the first estimation of the project in the pessimistic situations.**

- **The growth rate is equivalent to 4% for construction period (2016-2019)**
- **The growth rate is equivalent to 5.5% for operation period (2020-2039)**



Station No.	Station Name	Route (Km)	Distance to the previous station (m)	Length of lines without main route (m)	Turnout (No)	Station type
1	Some Sara	23+400	23400	1882	6	Class 3
2	Masal	42+300	18900	3659	15	Class 2
3	Rezvanshahr	54+200	11900	1882	6	Class 3
4	Khakhalian	63+560	9360	1882	6	Class 3
5	Hashtpar	84+800	21240	3659	15	Class 2
6	Siahkal	104+340	19540	1882	6	Class 3
7	Beheshti Mahalleh	126+700	22360	1882	6	Class 3
8	Lavanvil	145+660	18960	3659	15	Class 2
9	Astara	162+378	16718	33300	81	Main

Rasht-Astara Railway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants

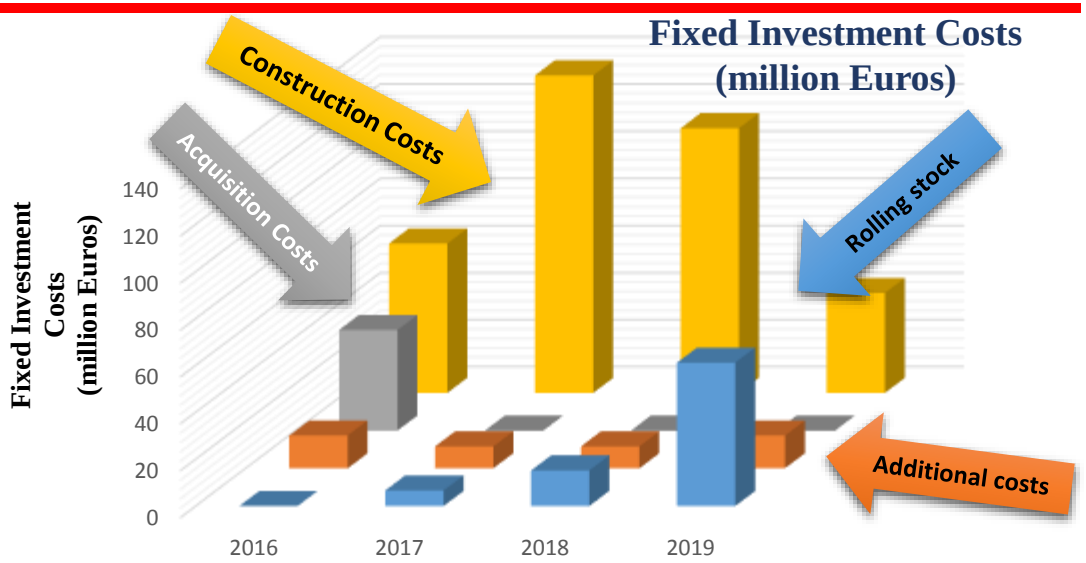
Financial Parameters*

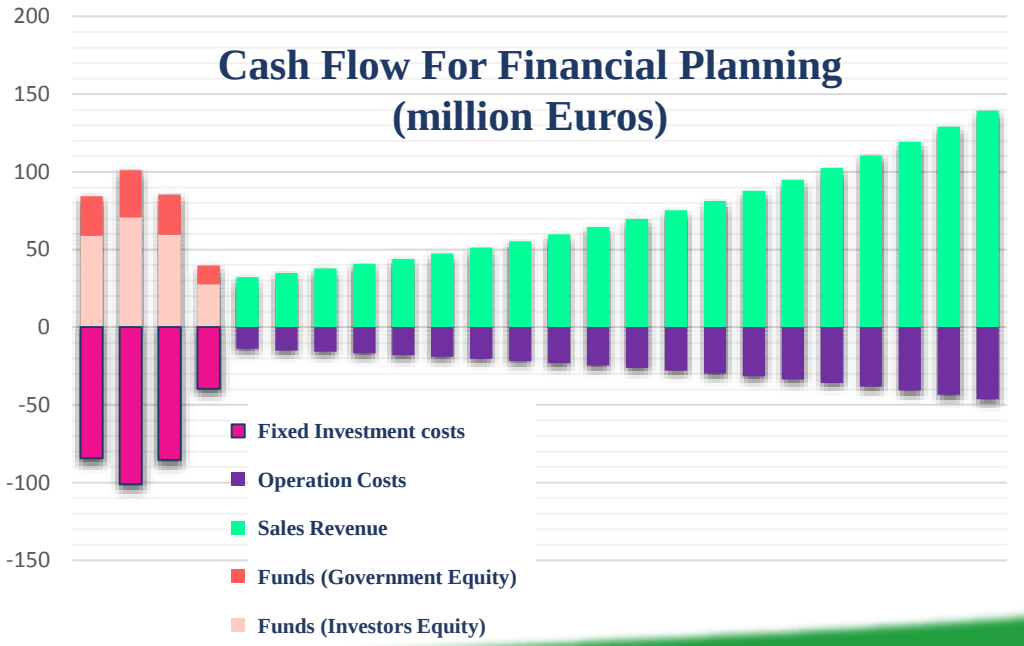
Fixed Investment Costs	497 million Euro
Government partnership	30%
NPV @ 6.5 %	96.18 million Euro
IRR (Project)	9.1 %
MRRR (Minimum required rate of return)	6.5 %

Exchange rate (in 2015): 40000Rials = 1Euros

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.

***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**





3 Shiraz- Boshehr- Asalouye Railway

Shiraz- Boshehr- Asalouye Railway

Technical Information*

Design Speed	160 Km/h Passenger –120 Km/h Cargo
Number of Lanes	Single Track (Extendable to Double Track)
Minimum Horizontal Curve Radius	1250m
Maximum Profile Slope	1.5%
Number & Length of Bridges	21 SB- Total length: 5.km
Number & length of Tunnels	32 T- Total length: 22.4 km
Passenger Traffic Volume	First Operation Year 1.2 million person
	20 th Operation Year: 3 million person
Cargo Traffic Volume	First Operation Year: 4.8 million ton
	20 th Operation Year: 12.1 million ton

Project Information

Construction Length	647 Km
Capacity	6.5 million ton/year
Location in Iran	Provinces of Kermanshah
Location in International Transportation Corridors	• EATL Rail Routes 5
Topography	• Flat: 443 Km, Hills: 137 Km, Mountains: 67 Km
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

***These are the first estimation of the project in the pessimistic situations.**

Motivator aspects to Start up Construction

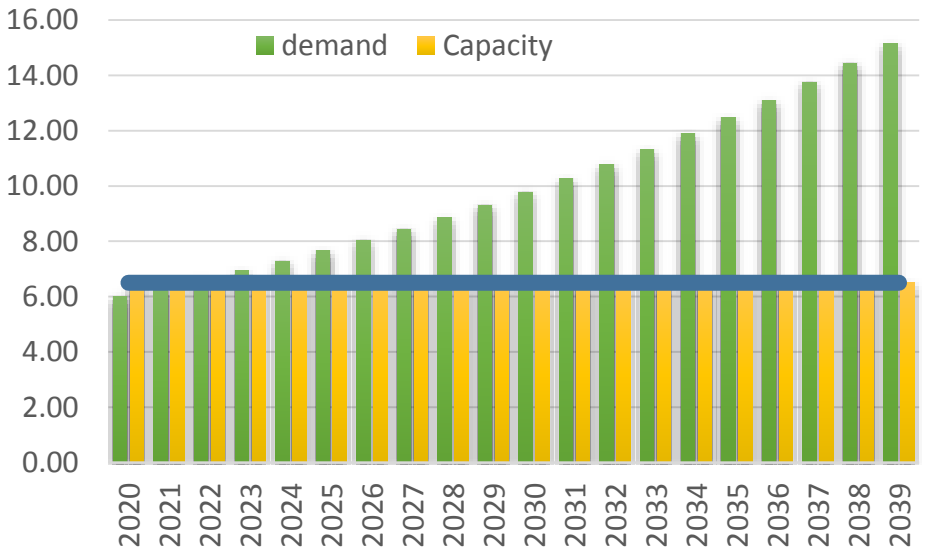
- **development of railway connection between middle Asia & European countries through Iran, Iraq, Syria & Lazeghiye Port**
- **Increasing power of incoming/ outgoing goods transportation**
- **Increasing transit power Iran and Iraq**
- **Possible development of commercial & trade exchanges with middle Asia & European countries**
- **Increasing transit power from west marginal countries of Caspian gulf**

Shiraz- Boshehr- Asalouye Railway

Shiraz- Boshehr- Asalouye Railway

- **The growth rate is equivalent to 5% for construction period (1394- 1400)**
- **The growth rate is equivalent to 5 % for operation period (1400-1420)**

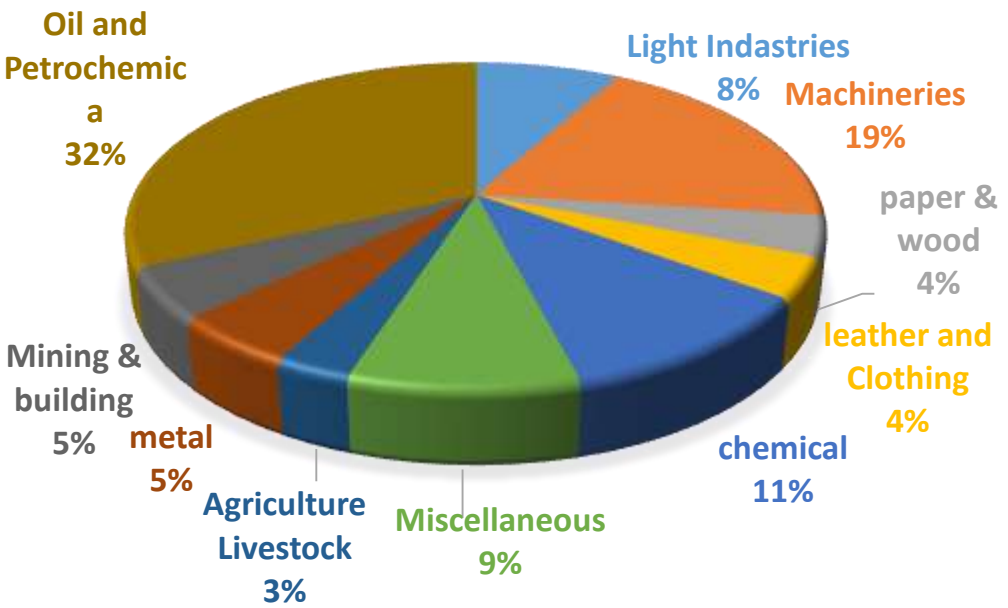
***These are the first estimation of the project in the pessimistic situations.**



***These are the first estimation of the project in the pessimistic situations.**

Passenger & Cargo Demand*

Year	Passenger (million passenger)	Transit (million ton)	Cargo (million ton)
2020	1.2	1.8	3.0
2025	1.5	2.3	3.8
2030	2.0	2.9	4.9
2035	2.5	3.7	6.2
2039	3.0	4.5	7.6



TYPES OF CARGO

Shiraz- Boshehr- Asalouye Railway

Estimate Equity & Credit Needs

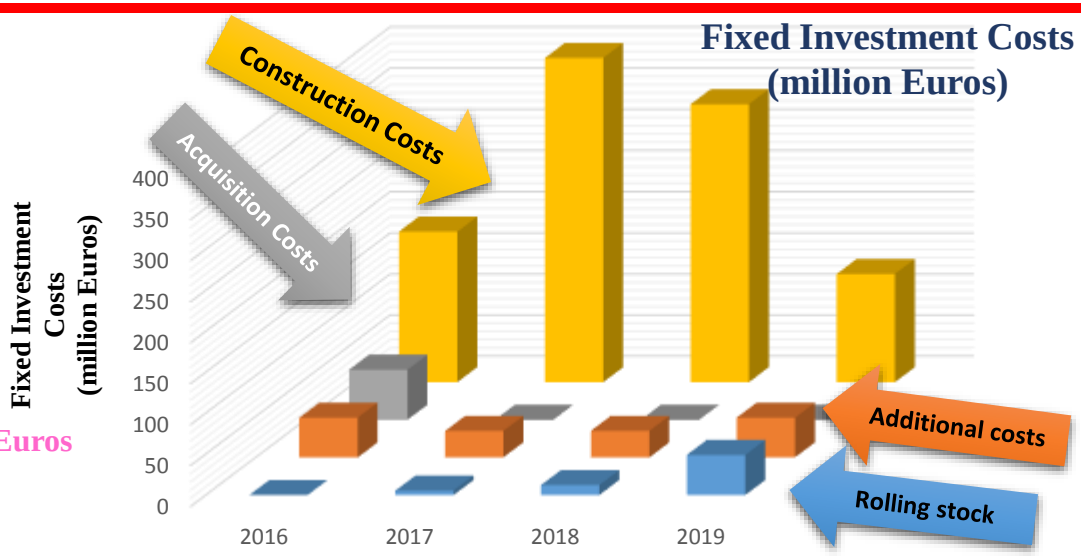
Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Iran Ministry Petroleum legal and General supports. Provincial facilitation supports

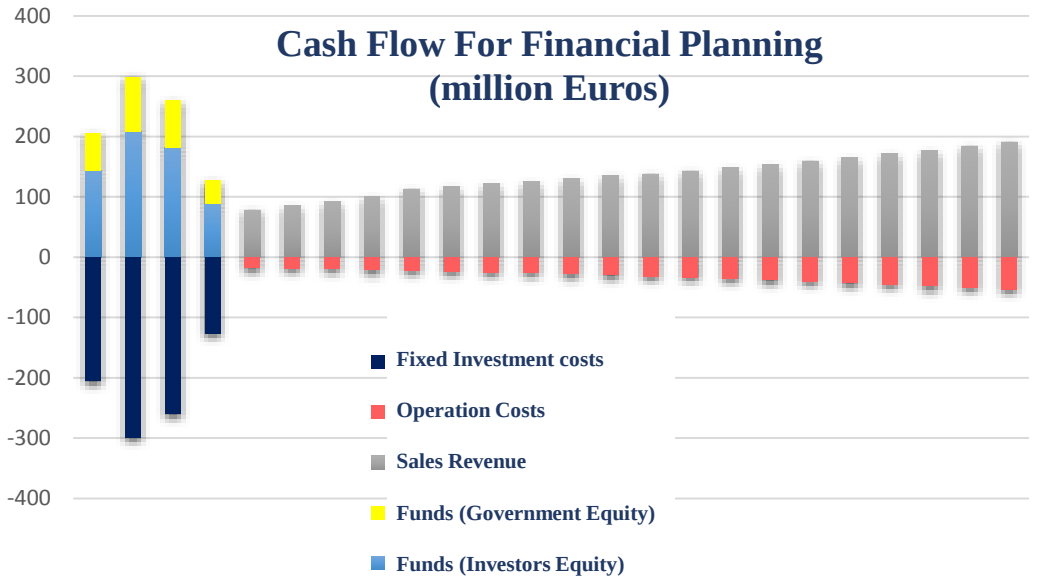
Financial Parameters* Exchange rate (in 2015): 40000Rials = 1Euros

Fixed Investment Costs	1179 million Euro
Government partnership	30%
NPV @ 6.5 %	12.64 million Euro
IRR (Project)	6.7 %
MRRR (Minimum required rate of return)	6.5 %

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.

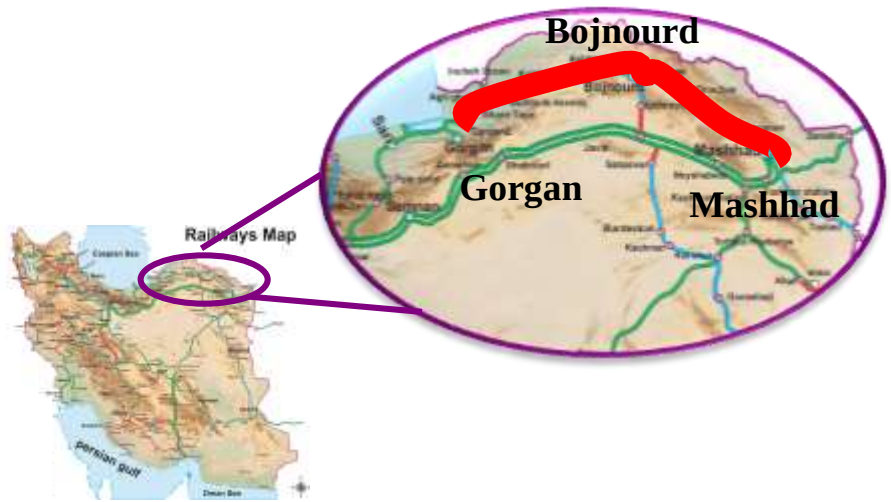
***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**





4 Mashhad- Bojnourd- Gorgan Railway

Mashhad-Bojnourd-Gorgan Railway



Project Information

Construction Length	635 Km
Capacity	6.5 million ton/year
Location in Iran	Provinces of Khouzestan & Lorestan
Location in International Transportation Corridors	• EATL Rail Routes 4
Topography	• Flat: 413Km, Hills: 127 Km, Mountains: 95 Km
Investment Period	Beginning Investment Year: 2020
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

Technical Information*

Design Speed	160 Km/h Passenger –120 Km/h Cargo
Number of Lanes	Single Track (Extendable to Double Track)
Minimum Horizontal Curve Radius	1500 m
Maximum Profile Slope	1.5%
Number & Length of Bridges	7.6 km in Total
Number & length of Tunnels	15.8 km in Total
Numbers of station	27
Passenger Traffic Volume	First Operation Year: 2.1 million person
	20th Operation Year: 2.9 million person
Cargo Traffic Volume	First Operation Year: 2.1 million ton
	20th Operation Year: 3.06 million ton

***These are the first estimation of the project in the pessimistic situations.**

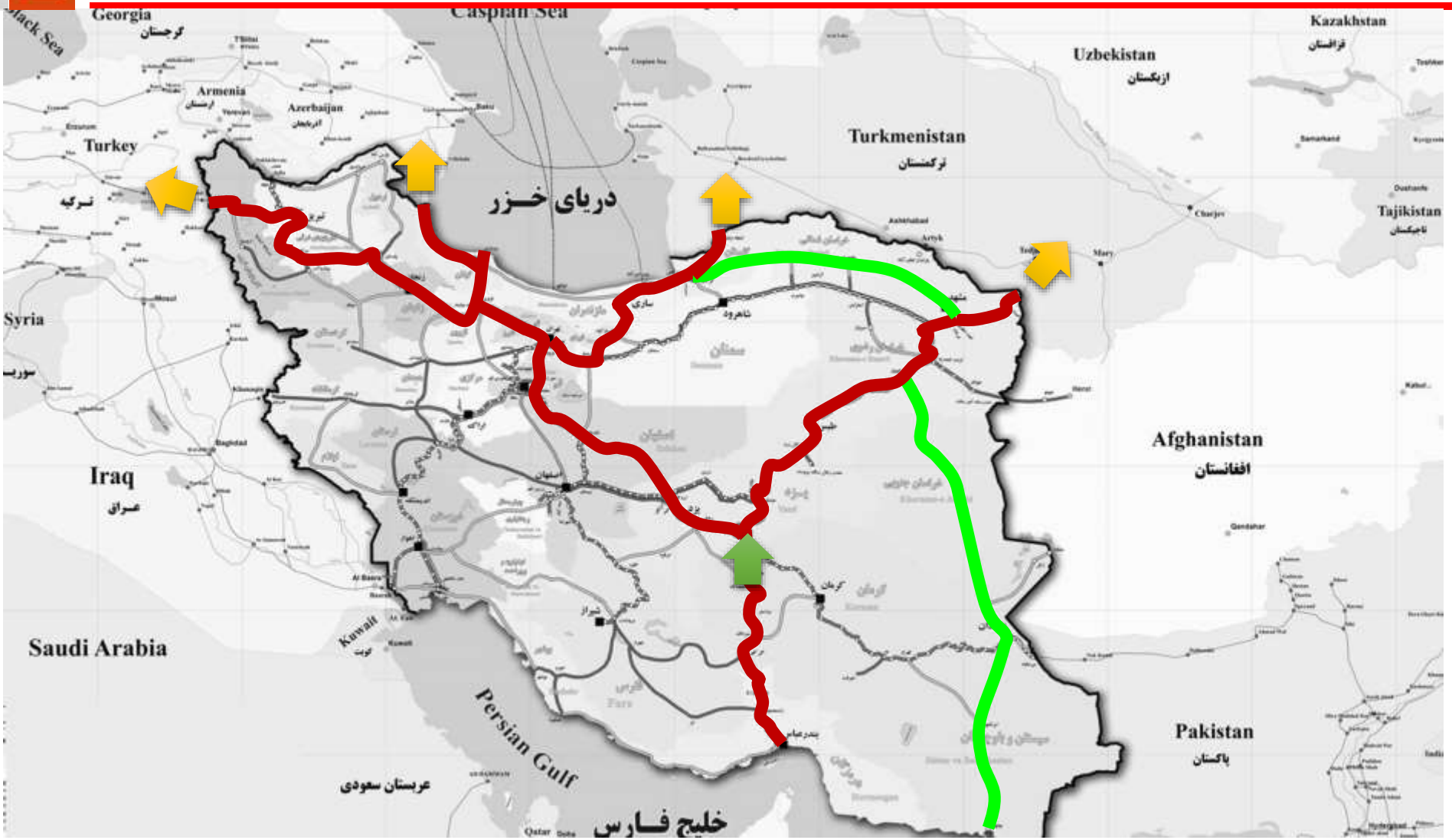
Motivator aspects to Start up Construction

Establishing new line for transit cargo transportation in east corridor of Caspian sea

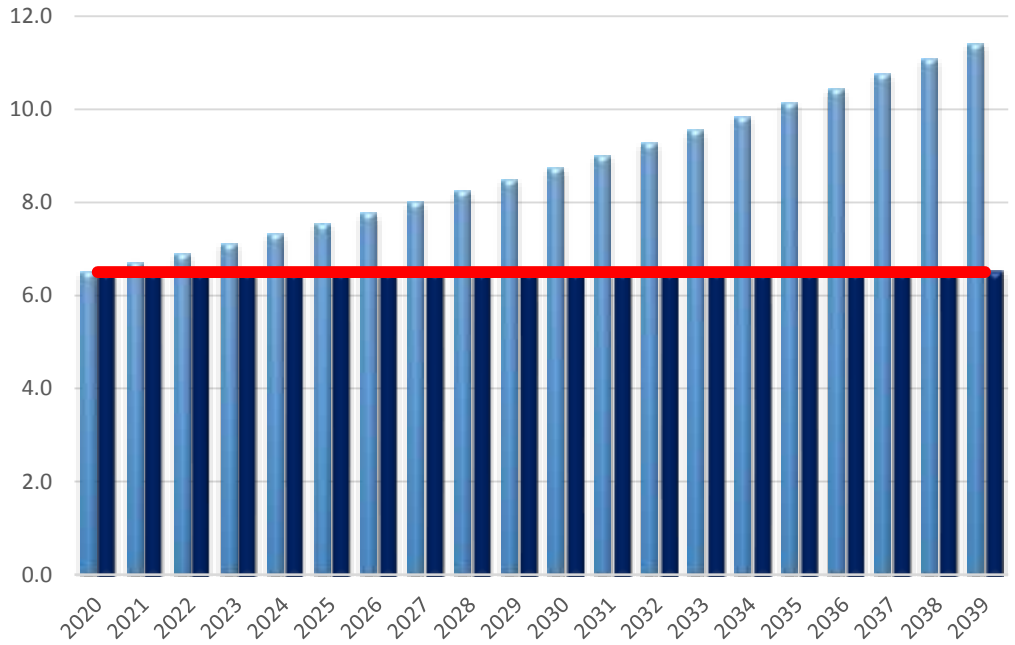
Increasing power of incoming/ outgoing goods transportation

Increasing transit power from west marginal countries of Caspian gulf

Mashhad- Bojnourd- Gorgan Railway



Mashhad-Bojnourd-Gorgan Railway

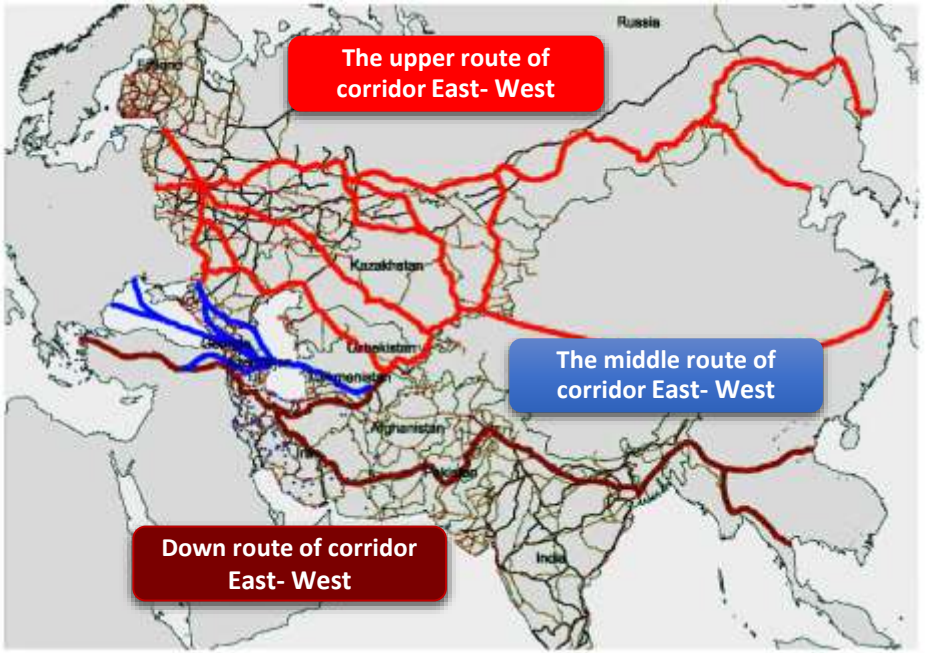


- **The growth rate passenger is equivalent to 3% for construction & operation period (2016-2039)**
- **The growth rate cargo is equivalent to 3% for construction & operation period (2016-2039)**

Passenger & Cargo Demand*

year	Cargo (million ton)	Transit (million ton)	Passenger (million passenger)
2020	1.5	2.5	2.5
2025	1.7	2.9	2.9
2030	2.0	3.4	3.4
2035	2.3	3.9	3.9
2039	2.6	4.4	4.4

***These are the first estimation of the project in the pessimistic situations.**



Mashhad-Bojnourd-Gorgan Railway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants

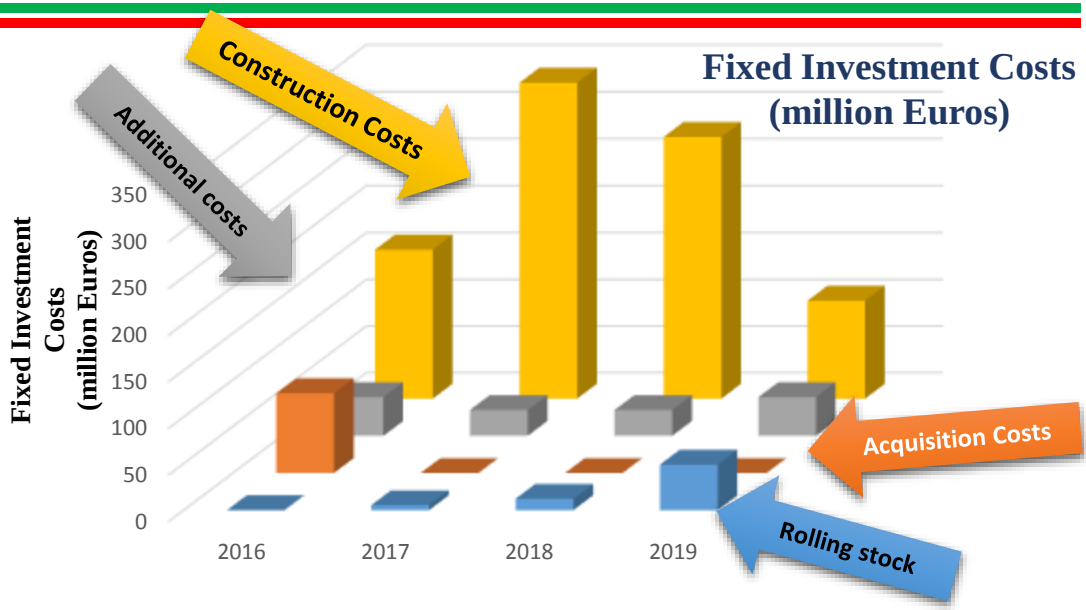
Financial Parameters*

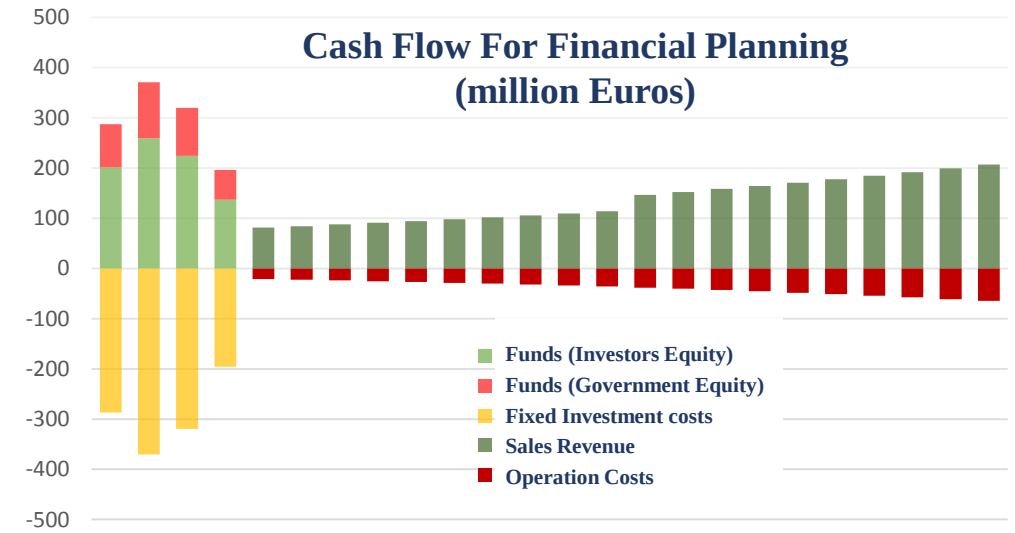
Fixed Investment Costs	1034 million Euro
Government partnership	30%
NPV @ 6.5 %	30.44 million Euro
IRR (Project)	6.9%
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.

***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**





5 Kermanshah- Khosravi Railway

Kermanshah-Khosravi Railway

Project Information

Construction Length	263 Km
Capacity	6.5 million ton/year
Location in Iran	Provinces of Kermanshah
Location in International Transportation Corridors	• EATL Rail Routes 4
Topography	• Flat: 228 Km, Hills: 25 Km, Mountains: 10 Km
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

Technical Information*

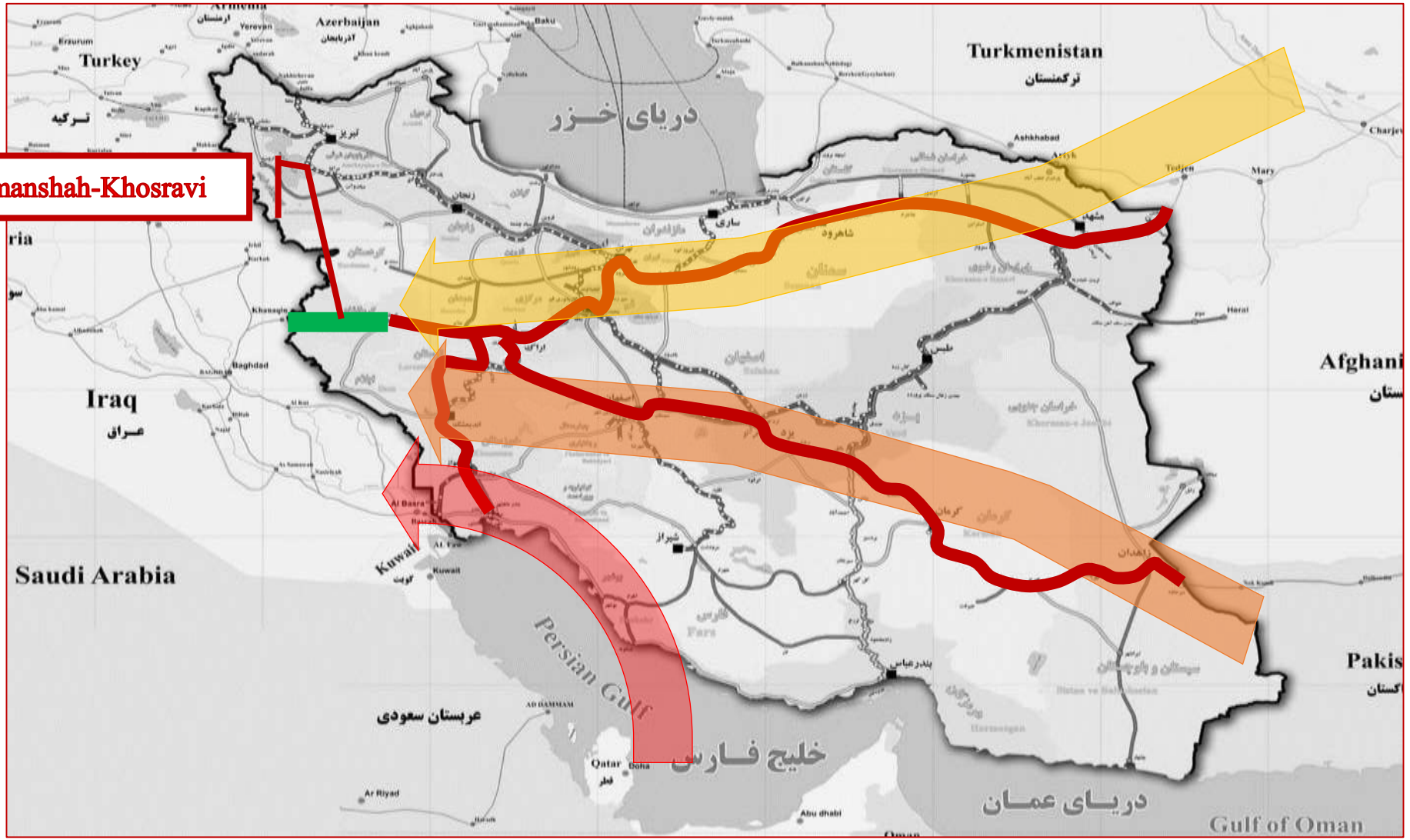
Design Speed	160 Km/h Passenger –120Km/h Cargo
Number of Lanes	Single Track (Extendable to Double Track)
Minimum Horizontal Curve Radius	1500 m
Maximum Profile Slope	1.5 %
Number & Length of Bridges	31 SB- Total length: 3.6 km
Passenger Traffic Volume	First Operation Year 2.5 million person
	20th Operation Year: 6.3 million person
Cargo Traffic Volume	First Operation Year: 2.3 million ton
	20th Operation Year: 5.8 million ton

***These are the first estimation of the project in the pessimistic situations.**

Motivator aspects to Start up Construction

- **development of railway connection between middle Asia & European countries through Iran, Iraq, Syria & Lazeghiye Port**
- **Increasing power of incoming/ outgoing goods transportation**
- **Increasing transit power Iran and Iraq**
- **Possible development of commercial & trade exchanges with middle Asia & European countries**
- **Increasing transit power from west marginal countries of Caspian gulf**

Kermanshah-Khosravi Railway

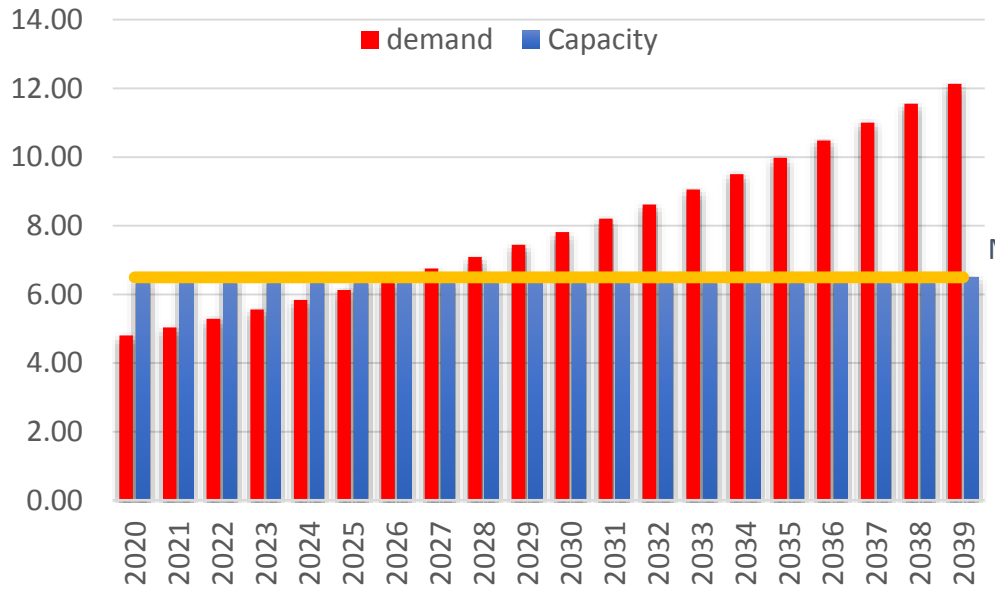


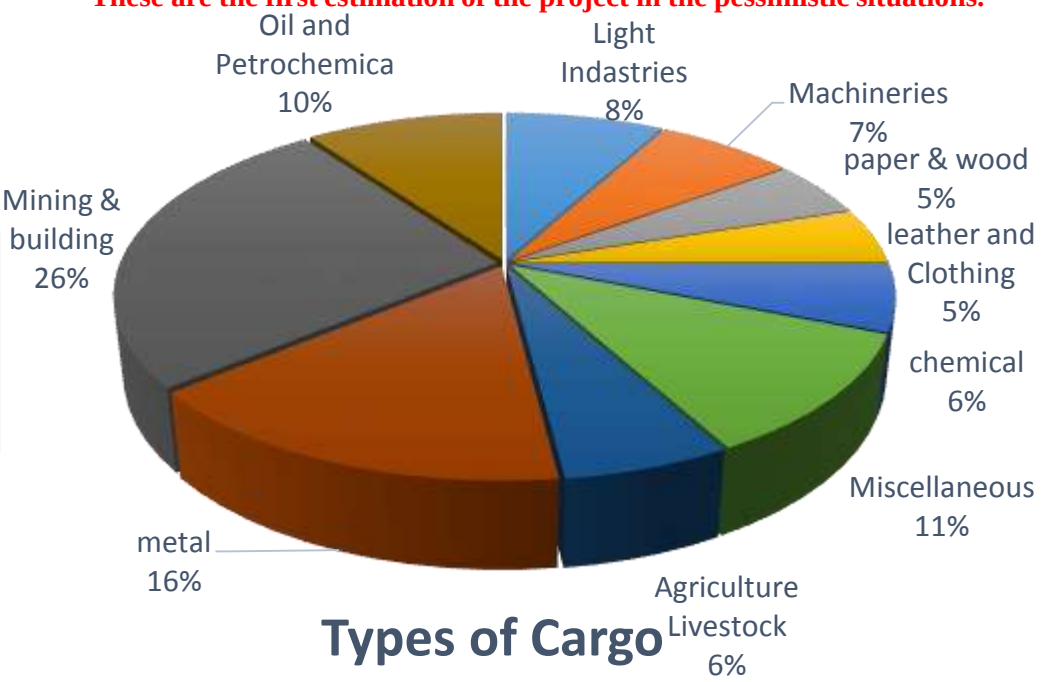
- **The growth rate passenger is equivalent to 4% for construction & operation period (2016-2039)**
- **The growth rate passenger is equivalent to 5% for construction & operation period (2016-2039)**

Passenger & Cargo Demand*

Year	Passenger (million passenger)	Transit (million ton)	Cargo (million ton)
2020	2.50	1.3	1.0
2025	3.2	1.7	1.3
2030	4.1	2.1	1.6
2035	5.2	2.7	2.1
2039	6.3	3.3	2.5

***These are the first estimation of the project in the pessimistic situations.**





Types of Cargo

Kermanshah- Khosravi Railway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants

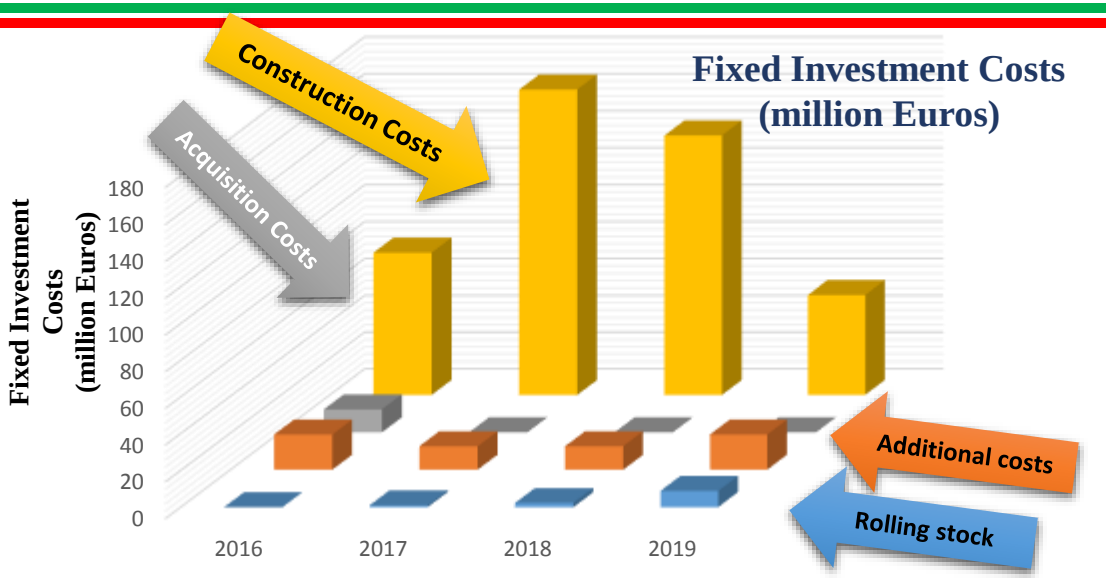
Financial Parameters*

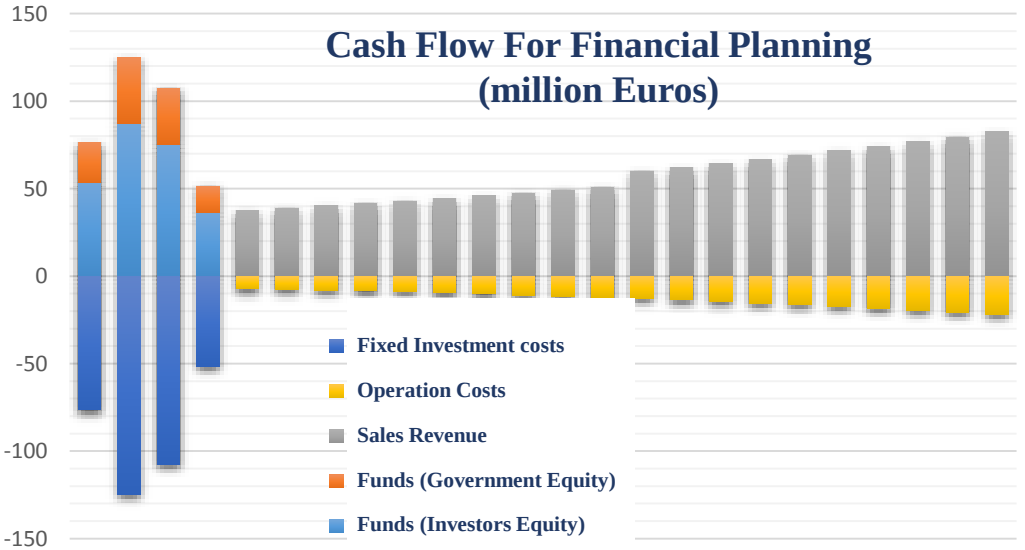
Fixed Investment Costs	463 million Euro
Government partnership	30%
NPV @ 6.5 %	19.98 million Euro
IRR (Project)	7.1 %
MRRR (Minimum required rate of return)	6.5 %

Exchange rate (in 2015): 40000Rials = 1Euros

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.

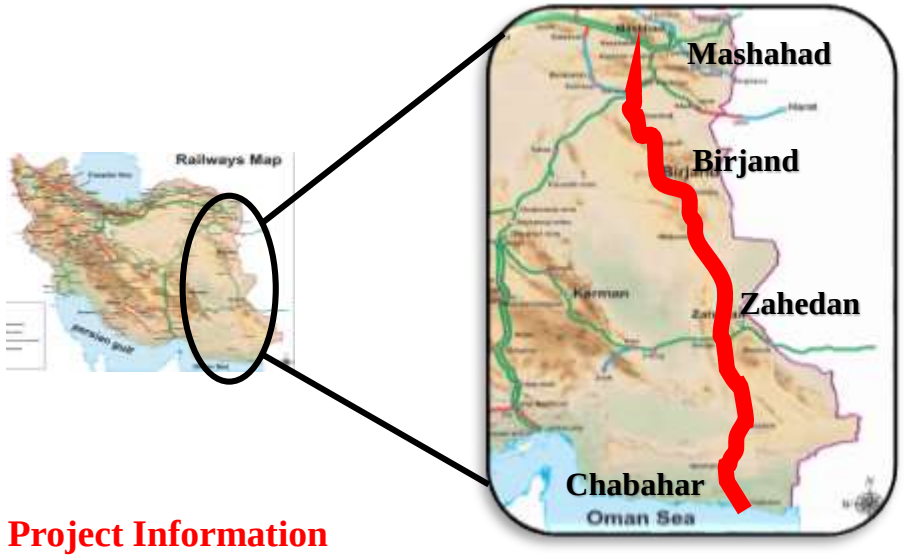
***These are the first estimation in the pessimistic situations. It is predicted IRR will be increased by termination of sanctions and recalculate with optimistic and helpful assumptions. All financial parameters can be changed relevant to technical negotiations.**





6 Kermanshah- Khosravi Railway

Chabahar- Zahedan- Birjand- Mashhad Railway



Project Information

Construction Length	1356 Km
Capacity	7 million ton/year
Location in Iran	Provinces of sistan & balouchestan & khorasan
Location in International Transportation Corridors	• EATL Rail Routes 5
Topography	• Flat: 236Km, Hills: 997Km, Mountains:123Km
Investment Period	Beginning Investment Year: 2016
	Construction Period: 4 Years
	Operation Period: 20 Years
	Concession Period: 20 Years

Technical Information*

Design Speed	160 Km/h Passenger –120 Km/h Cargo
Number of Lanes	Single Track (Extendable to Double Track)
Minimum Horizontal Curve Radius	1500 m
Maximum Profile Slope	1.5%
Number & Length of Bridges	10060 m in total
Number & length of Tunnels	10800 m in total
Passenger Traffic Volume	First Operation Year 1.8 million person
	20th Operation Year: 2.8 million person
Cargo Traffic Volume	First Operation Year: 5 million ton
	20th Operation Year: 15 million ton

***These are the first estimation of the project in the pessimistic situations.**

Motivator aspects to Start up Construction

Completion of railway connection between Southeast Asia and middle Asia & European countries

Increasing power of incoming/ outgoing goods transportation

Making a link between Chabahar seaport and Iran railway network, Also between Central Asia & European countries with high seas

Activate Eastern Transit Corridor of Iran and decrease the travel Distance between high seas and Central Asia

Chabahar-Zahedan-Birjand-Mashhad Railway

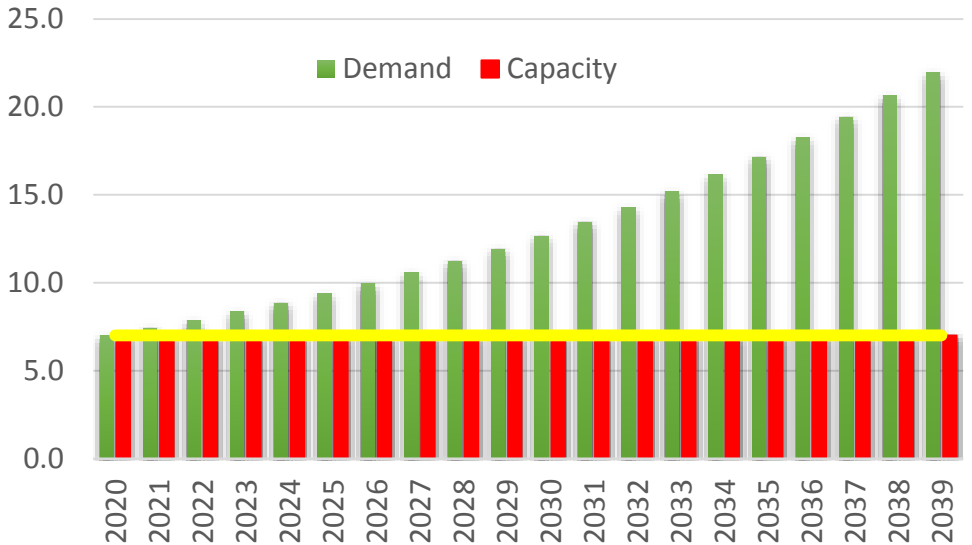
Chabahar- Zahedan- Birjand-Mashhad Railway

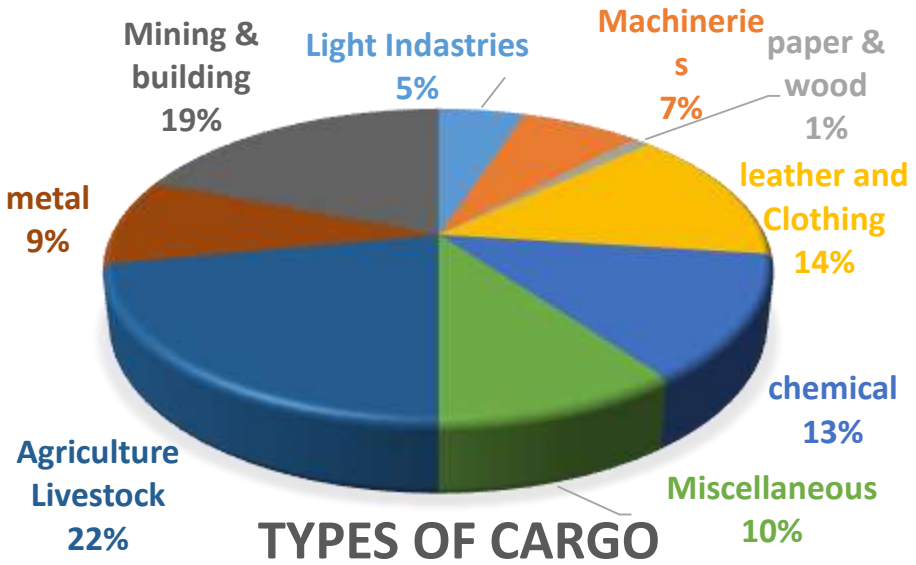
- The growth rate passenger is equivalent to 3% for construction & operation period (2016-2039)
- The growth rate cargo is equivalent o 7% for construction & operation period (2016-2039)

Passenger & Cargo Demand*

year	Passenger (million passenger)	Transit (million ton)	Cargo (million ton)
2020	1.8	2	3
2025	2.1	2.8	4.3
2030	2.40	3.9	6.0
2035	2.64	4.9	7.6
2039	2.86	6.0	9.3

*These are the first estimation of the project in the pessimistic situations.





Chabahar-Zahedan-Birjand-Mashhad Railway

Estimate Equity & Credit Needs

Equity Sources & Capital Availability	Foreign & local Investors
Credit Sources	Bank, Government (Direct Loans or Loan Guarantees), Grants
Local Economic Development Incentives	Iran Ministry Petroleum legal and General upports. Provincial facilitation supports

Financial Parameters*

Fixed Investment Costs	2642 million Euro
Government partnership	30%
NPV @ 6.5 %	205.33 million Euro
IRR (Project)	7.6 %
MRRR (Minimum required rate of return)	6.5%

Exchange rate (in 2015): 40000Rials = 1Euros

PPP method is selected in this project is BOT.
The private investor is responsible for financing, construction & full network maintenance, and the Government is responsible for full route traffic, rolling stock & operation of the project. portion of sales revenue belongs to private investor is equivalent to 50% of passenger, transit & cargo income.

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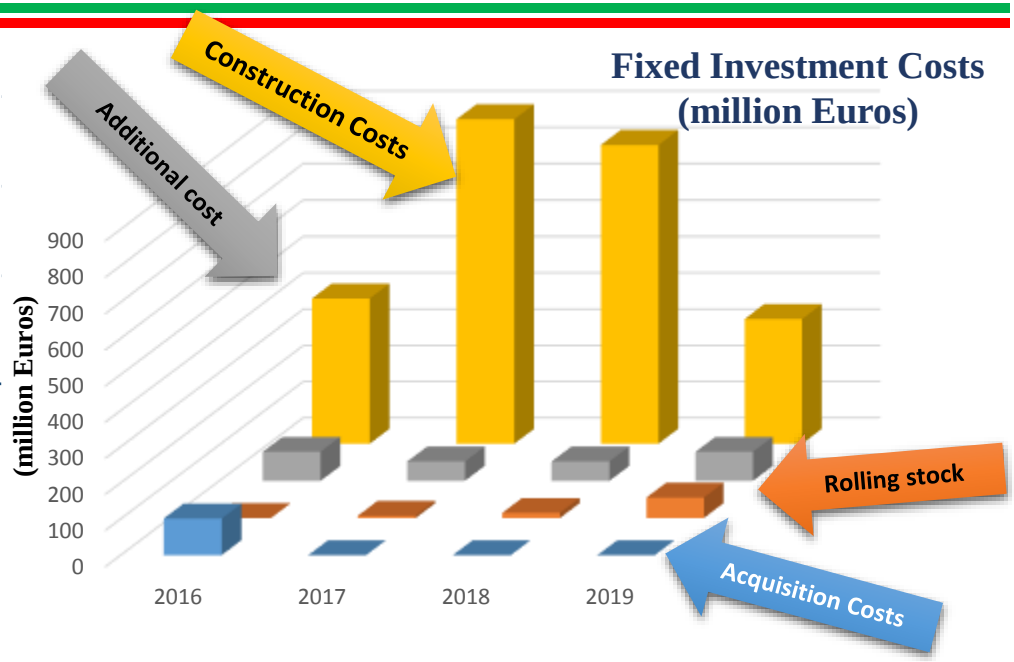

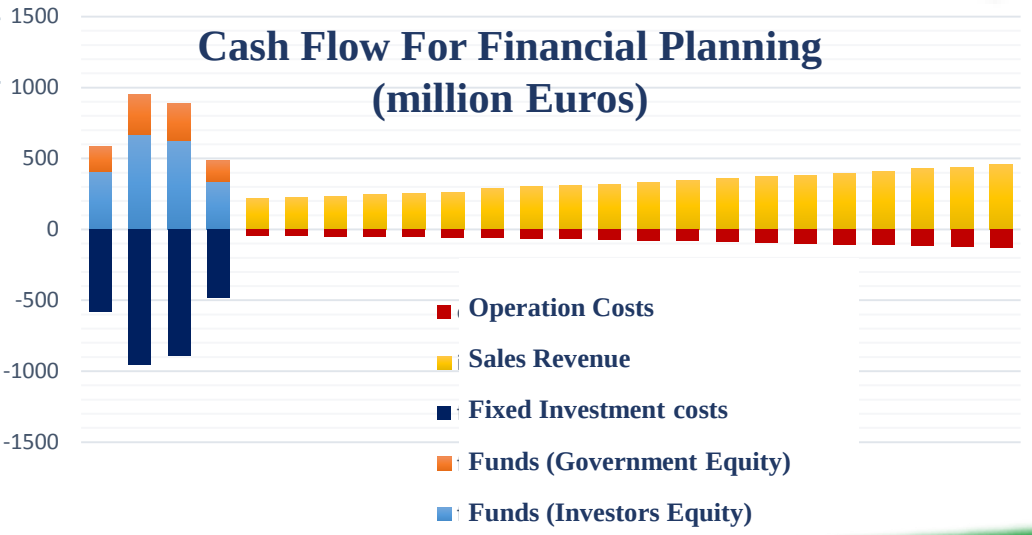

(SWOT Strategy)

Strengths & Opportunities

- **Increased the concession period for several stretches to 20-30 years;**
- **Restructuring project configurations with regard to the number of lanes, bridges, etc.;**
- **Upward revision of project costs;**
- **Toll charges will be allowed to escalate each year;**
- **Toll is based not just on the length of the road, but also on the capital cost incurred;**
- **Permission to establish and operate rest areas and fuel stations located in the project's route;**
- **Permission to build and operate of advertising billboards located in the project's route.**

Weaknesses & Threats

Risk and Liabilities	Assigned to Investor	Assigned to Government	Assigned to Shared
Design and Construction	●		
Cost Overrun	●		
Timelines	●		
Acquisition of properties		●	
Relocation of public infrastructure		●	
Contaminated soil		●	
Condition of assets at the end of the agreement		●	
Toll revenues			●
Toll collection and management		●	
Demand & Traffic			●

Thanks

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