

REPUBLIC OF ARMENIA

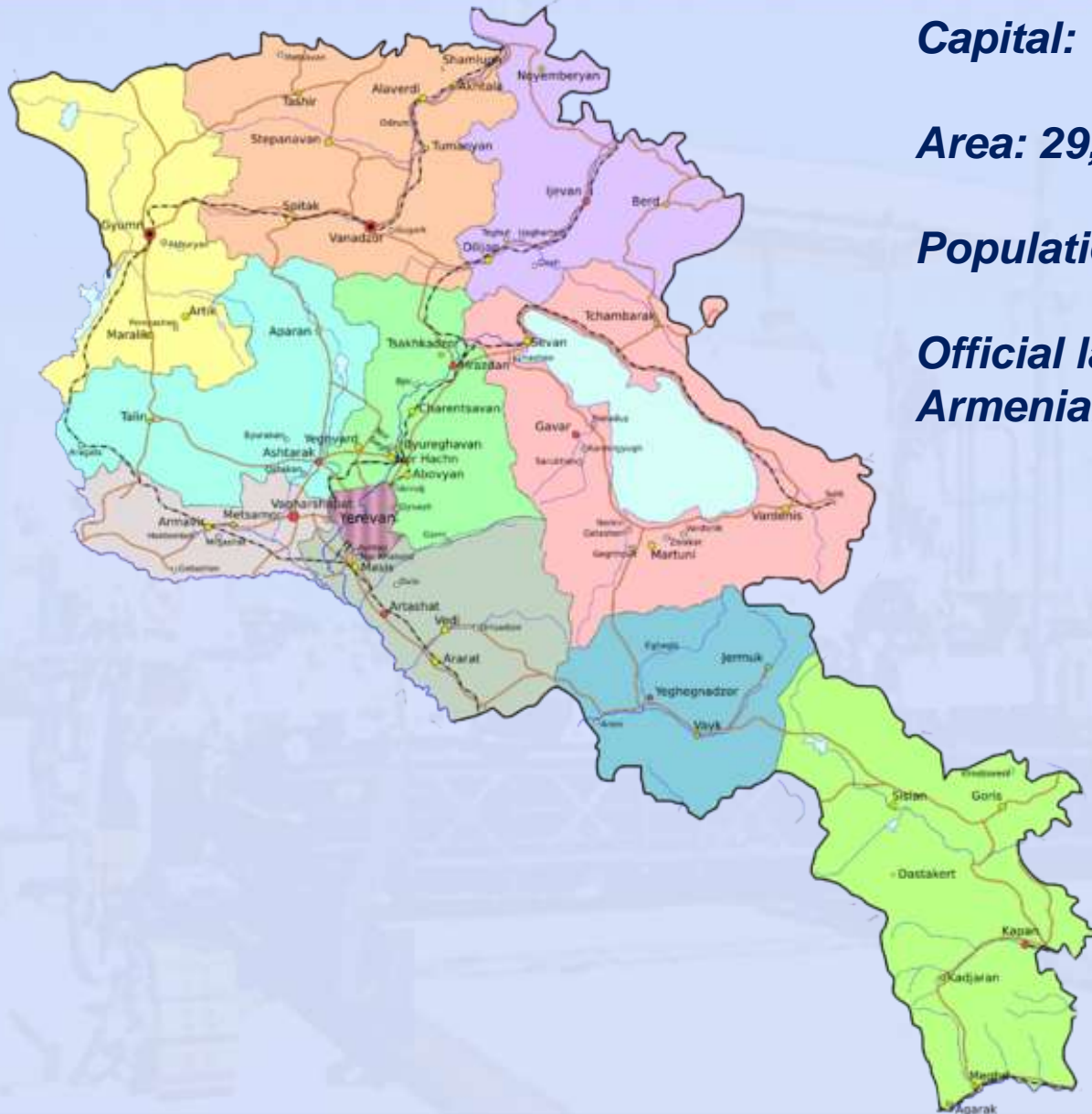


*Seoul, Korea
04-06 September 2017*

Ministry of Transport, Communication and Information Technologies of the Republic of Armenia

The Ministry is a republican body of executive authority that elaborates and implements the policy of the Government of the Republic of Armenia in the field of:

- Transport and road-construction
- communication
- information technologies



Capital: Yerevan

Area: 29,743 km²

Population : 3,031,670

**Official language:
Armenian**

Priority Transport Projects in Republic of Armenia



1. North-South Road Corridor Investment Program
2. M6 Vanadzor-Alaverdi-Georgia interstate road



Poti (Black Sea) – Georgia – Armenia – Iran – Bandar Abbas (Persian Gulf)

North-South Road Corridor, transit (towards Poti)





Brief Introduction of the North-South Road Corridor Investment Program



North-South Road Corridor construction length shall be **463km.**

Design speed-**100 km/h.**

Traffic duration- **4,5-5h.**

The length of the existing road -**556 km.**

Traffic speed- **30-90 km/h.**

Traffic duration- **9,5-10h.**

Total investments- about **2,3 billion USD** without VAT.

Existing, agreed and considered.

- ADB financing- **500 million USD.**
- EIB financing - **68 million + 136 million + 204 million USD.**
- NIF Grant - **14 million + 14 million + 36 million USD.**
- Netherlands grants - **68 million USD.**
- EDB financing -**150 million + 350 million USD.**
- Total - **1,540 million USD.**

Remaining - **760 million USD.**

Implementation period-**2010 – 2022.**



Description of the North-South Road Corridor Investment Program

The North-South Road Corridor Investment Program is aimed at reconstruction of the 2nd-3rd category carriageway with a speed limit of 30-90 km/hour the length of which is 556 km from Bavra in Georgia to the border with Iran in Agarak , upgrading it up to 463 km-long 1st category high-speed carriageway section with a speed limit of 100-110 km/hour enabling to cross the mentioned section within the decreased 4.5-5 hours period instead of current 9.5-10 hours increasing the comfortability and safety by ensuring the fulfilment of the Project goal in regards of making the North-South Road a transit carriageway for passenger and cargo transportation from the East to the West within scope of TRACECA and Silk Road Projects.

The preliminary estimated cost of the construction works of the North-South Road Corridor Investment Program is about 2,3 billion USD (excluding VAT and the cost of land acquisition and resettlement), 200 million USD of which shall be allocated for design, technical supervision and other consulting services, and 2,1 billion USD-for capital construction.



Tranche 1, Yerevan-Artashat and Yerevan-Ashtarak

Total length- 31 km.

Construction completion— June, 2016

Construction cost- 70,4 million USD.

Contractor- ISOLUX CORSAN /Spain/.

Engineer/PMC- "Safege-Eptisa"JV /France/.

Opened for traffic- December, 2015.

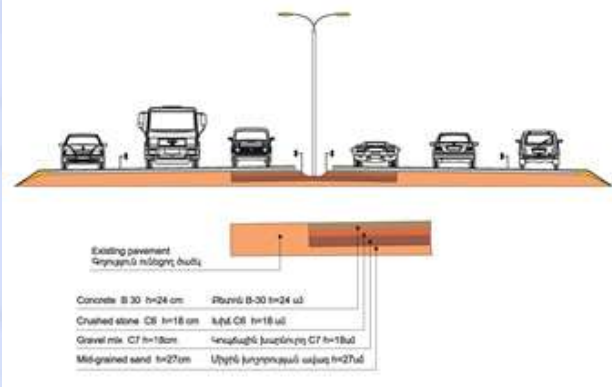
Put into operation – June, 2016.

Guarantee period— by September 2017.

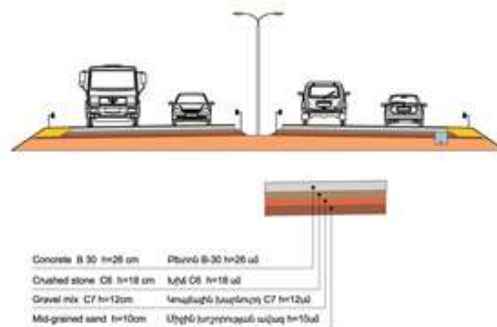
Capital repair, reconstruction and construction of 9 overpasses and bridges are carried out in scope of the saving measures.



Հյուսիս-հարավ ճանապարհային ծրագիր Հ2 /Երևան-Արարատ/
North-South Road Program S2 /Yerevan-Ararat/



Հյուսիս-հարավ ճանապարհային ծրագիր Հ3 /Երևան-Աշտարակ/
North-South Road Program S3 /Yerevan-Ashtarak/





Tranche 2, **Ashtarak-Talin**

Section length- **41,9 km.**

Construction completion- **2018.**

Construction cost- **179,6 million USD.**

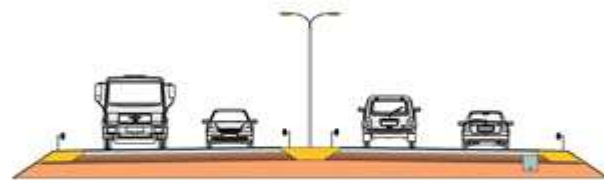
Contractor- **ISOLUX CORSAN /Spain/.**

Engineer/PMC- **"Safège-Eptisa"JV /France/.**

Issues – **LARP, Infrastructure, Archeological.**



Հյուսիս-հարավ ճանապարհային ծրագիր Հ1 /Աշտարակ-Թալին/ North-South Road Program S1 /Ashtarak-Talin/



Concrete B 30 h=26 cm	Քիմիկ B-30 h=26 սմ
Crushed stone C6 h=18 cm	Կլիճ C6 h=18 սմ
Natural granular sub-base h=15cm	Անյալա-կոմպակտ ներքինիք h=15սմ
Granular capping layer h=18cm	Կոմպակտ քակարկ շերտ h=18սմ



Tranche 3, **Talin-Gyumri**

Section length-**46,2 km.**

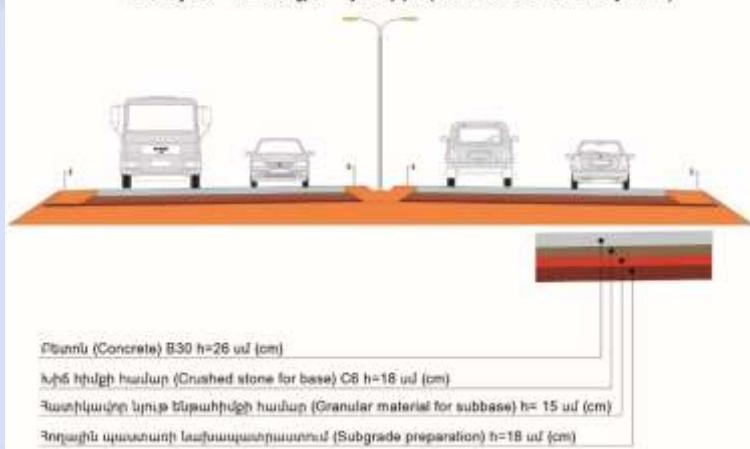
Talin-Gyumri section is divided between **ADB** and **EIB**:

- **ADB** – Talin-Lanjik- **18,7 km.**
- **EIB** – Lanjik-Gyumri- **27,5 km.**
- The tender was announced in **June, 2015.**
- Contracts awarded in **2015-2016.**
- Contractor - **Sinohydro Corporation LTD, China.**
- Engineer/ technical supervision- **SPEA-IRD Consortium, Italy.**
- Contract- Talin-Lanjik, about **60 million USD.**
- Contract-Lanjik-Gyumri, about **84 million USD.**
- Construction completion - **2018-2019.**

Tranche 3



Հատված 33 /Թալին-Գյումրի/ (section S3 Talin-Gyumri)





Tranche 4, Artashat-Agarak

The current length of Artashat-Agarak /checkpoint/ is **358km**.

The road will be reduced by approximately **95km**.

Feasibility study is completed. The expected internal rate of income (EIRR) is **14%**.

The preliminary design for all sections and the detailed design for Sisian-Qajaran section are ready.

Designer- **SPEA-IRD Consortium (Italy)**

Tender for the construction of Agarak-Qajaran section was announced in **August 2016** Financing- EDB loan- **150 million USD**.

Construction completion- **2019**.

Additional fund possibility for Tranche 4.

- EDB loan- **350 million USD**.
- ADB loan-**170-200 million USD**.
- EIB loan-**170-200 million USD**.
- Possible grants- NIF and the Dutch Government – up to**100 million USD**.

(PPP) Implementation is possible, research memorandums are signed with **SINOHYDRO, STRABAG, AVIC, etc...** companies.

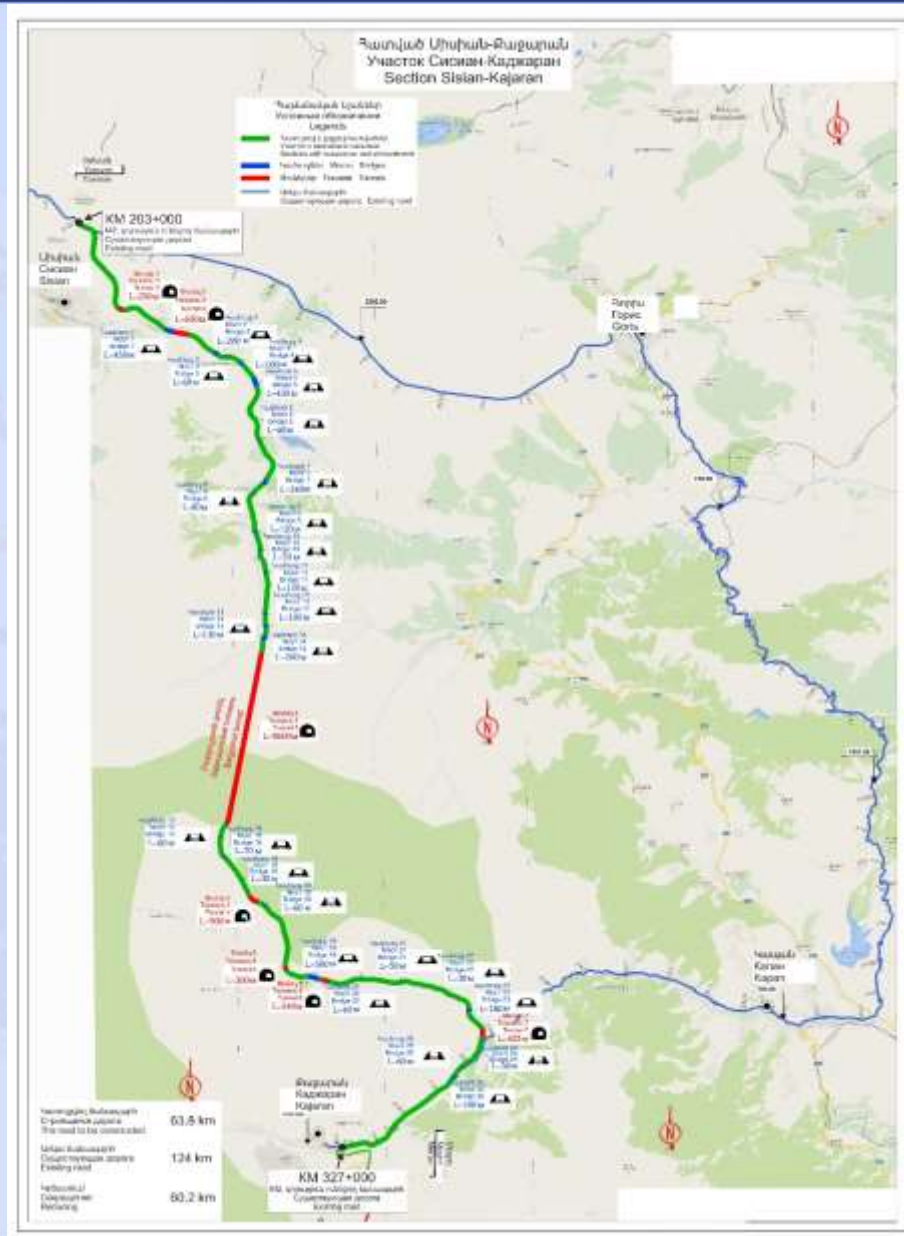




Tranche 4 , Artashat-Agarak, key sectors- Sisian-Qajaran

The total construction length of Sisian-Qajaran section is 63.8km, and the estimated cost is about 490 million USD without VAT and land acquisition cost (By the WB HDMI 4 project the EERR makes more than 14%). The required amount of financing without VAT and including the unexpected expenses and the consultancy is 520 million USD, from which:

- The cost of 54.3 km total length section of only the roads (44.7km), bridges (3.6km), as well as the existing small tunnels (with 0.1-0.7km length , in total 6 and the whole- 2.4km) and the approaching roads(12 X 0.3km= 3.6km) makes about 310 million USD. Financing is not available yet. It is proposed to apply for receiving 350 million USD credit funds from the Eurasian fund for Stabilization and Development of Eurasian Development Bank for financing of the construction of the mentioned sections (54.3km)-and end of Qajaran tunnel– Qajaran (4km) sections including the unexpected expenses and the consultancy .***
- The cost of 9.5 km total length section of Bargushat tunnel (8.6km) and the approaching roads (0.9km) makes about 180 million USD. Financing is not available yet. It is proposed to apply for using 170 million USD credit funds available in Tranche 4 from Asian Development Bank, and 25 million USD remaining from Tranche 1-3 , total 195 million USD, including the unexpected expenses and the consultancy. The possibility of Public Private-Partnership is considered in parallel.***





Tranche 4, **Artashat-Agarak, key sectors - Qajaran-Agarak**

The total construction length of Agarak-Qajaran section is 42km, and the estimated cost is about 280 million USD without VAT and land acquisition cost (By the WB HDMI 4 project the EERR makes more than 14%). The required amount of financing without VAT and including the unexpected expenses and the consultancy is 310 million USD, from which :

- ***Only the roads and bridges section (36km) makes about 160 million USD from which the end of Qajaran tunnel– Qajaran section (4km) make about 25 million USD. Financing is available. Credit funds of Eurasian Development Bank with the amount of 150 million USD, which is sufficient for the construction of the beginning of Agarak-Qajaran tunnel section 32 km including the unexpected costs and the consultancy. The difference for the end of Qajaran tunnel – Qajaran section (4km) (about 25 million USD including the unexpected costs and consultancy) is envisaged to be completed at the account of tender savings and/or in scope of further tranche of Eurasian Development Bank credit funds.***
- ***The section of Qajaran tunnel (4.8km) and the approaching roads (1.2km) make about 130 million USD. Financing is not available yet. It is proposed to apply for 120 million USD Euro credit funds from European Investment Bank (equivalent to 135 million USD) with the ADB co-financing to finance the construction of the mentioned section, including the unexpected funds and consultancy. The possibility of Public Private-Partnership is considered in parallel.***





Investment and PPP implementation possibilities.

The 80% of Artashat-Agarak section can be separated and considered as project implementation in scope of concession (Investment and PPP). The existing carriageway section shall be maintained as a free alternative of toll road. The section envisages tunnels with 0.2-9km length with two directions, single-lane carriageway traffic and approximately with 30km total length. The length of the existing road of the mentioned section is 358km which as a result shall be reduced approximately 95km.

Note, for example:

- 148km length of Sisian-Qajaran section shall be reduced by half and become a road with 74km length.**
- 54km length of Qajaran-Agarak section shall be reduced by 12km and become a road with 42km length. More than 72km reduction is envisaged in the mentioned subsections and the increase up to 100km/h speed which will ensure the reduction of the traffic duration by 3-4 hours.**

The estimated preliminary cost of the construction works of Artashat- Agarak section is about 1,8 billion USD (including the cost of consulting services, without VAT and the land acquisition and resettlement cost), from which the financing of Qajaran-Agarak section with 150 million USD is already being implemented by the RA through EDB funds.



Tranche 5, Gyumri-Bavra

The construction length of Gyumri-Bavra /checkpoint/ road section about **60km**.

Gyumri-Bavra section is envisaged to be implemented within EIB credit funds.

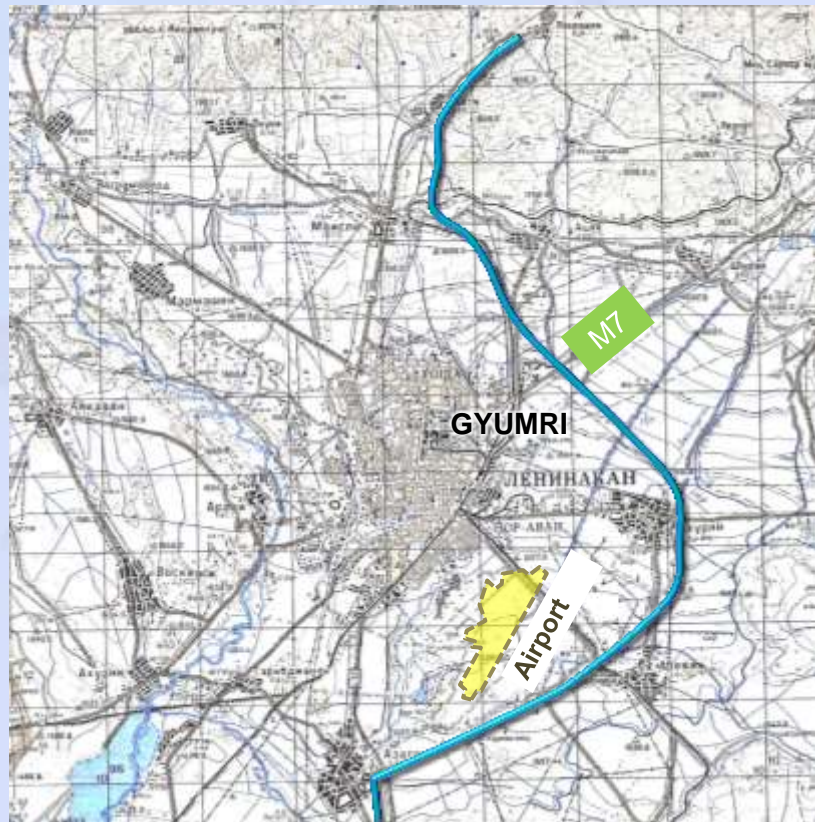
Estimated cost- about **140 million USD**.

Construction duration- **24-36 months**.

Feasibility study, preliminary and detailed designs are financed by NIF grant, the contract is signed,

Designer – **Lotti (Italy)**.

Within the scope of the current funds there is a possibility to reach **Gyumri/bypass from the end of Tranche 3 up to M7 Gyumri-Vanadzor road**.





PPP implementation general methods/conditions

- **State participation method and volume (Investments and PPP).**
 - The government will co-finance the VAT (20%) and the cost of land acquisition and resettlement. The Government already finances more than 30% of the total program, with the involvement of loan and other funds.
- **Type of concession (Investments and PPP) , (Build-Manage-Transfer, Build-Transfer-Manage, Build-Own-Manage, Build-Own-Manage-Transfer, Buy- Build-Manage).**

The following sequence is envisaged, according to preference. Build-Own-Manage-Transfer

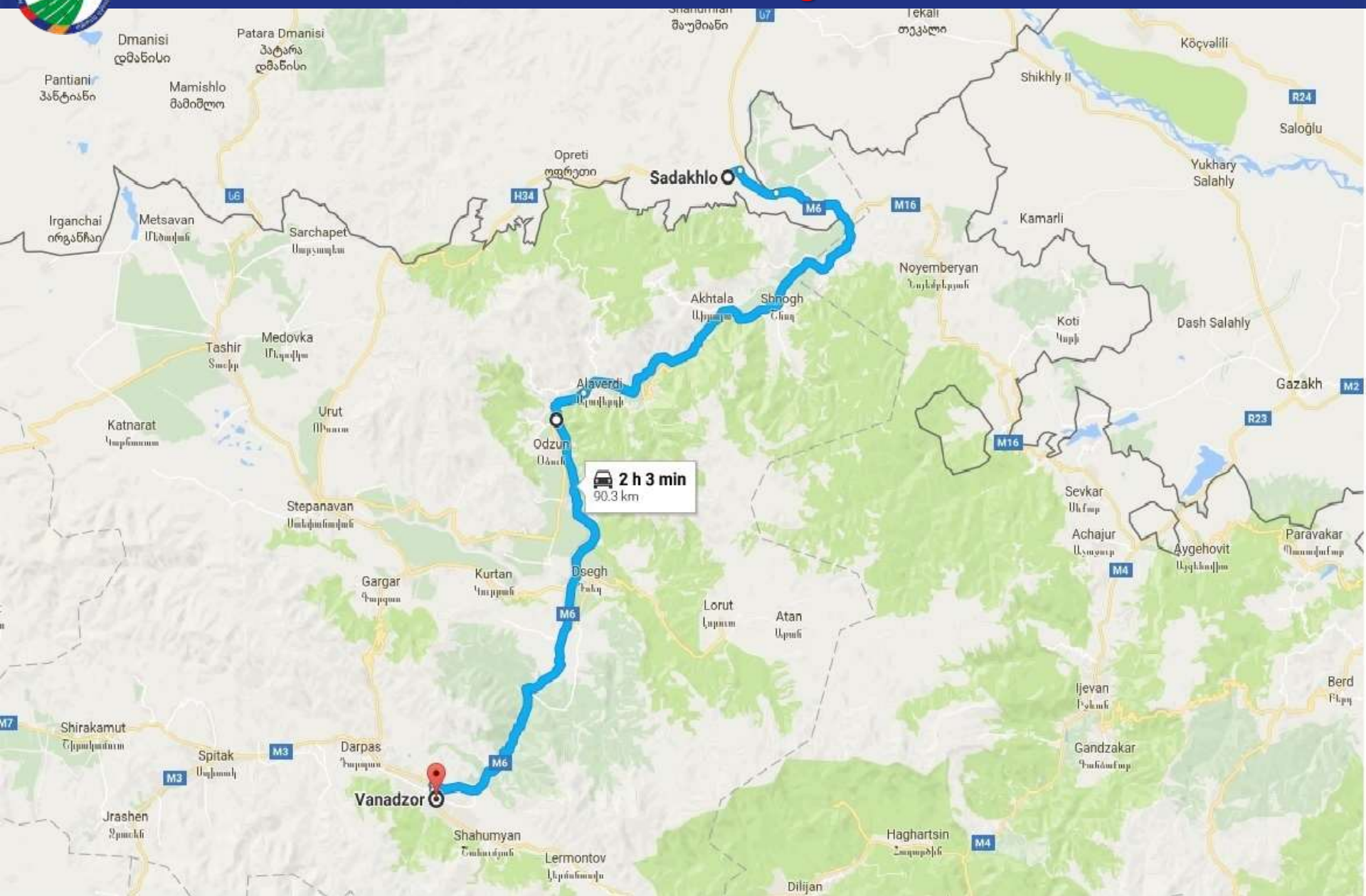
- Build-Manage-Transfer,
- Build-Transfer-Manage,
- Build-Own-Manage,
- Buy-Build-Manage

The mentioned options are subject to discussion and the preference shall be provided only to the companies which submitted well-grounded economic / technical / legal proposals prepared properly.

- **Other envisaged conditions of the Concession (Investments and PPP).**
 - The relevant legal or contractual regulation shall define a state liability before the end of the operation regarding the refund / compensation of the possible negative difference of net investments (without the expected profit) of the envisaged actions.



M6 Vanadzor-Alaverdi-Georgia interstate Road





M6 Vanadzor-Alaverdi-Georgia interstate Road

The project consist of the (2x1) rehabilitation and upgrading of the M6 interstate road on a length of about 90 km between Vanadzor in central Armenia and Bagratashen at the North eastern border between Armenia and Georgia.

Section length-**90 km**.

Vanadzor-Alaverdi section is divided between **EIB and ADB**:

- **EIB** – 0+000 – km 38+450 - **38,5km**.
- **ADB** – 38+450 – km 90+191 – **51.5 km**.

- The tender for EIB section was announced in **2015**.
- Contraction works was started in **September, 2016**.
- Contractors – **Kapavor LLC, AraratChanshin and Dor Lider JV, Chanaparh and KamurjShin JV Armenia**.
- Engineer/ technical supervision - **Kocks, Germany**.
- Contract - **about 28.6 million USD**.
- Construction completion - **2020**.

- The tender for **ADB** section was announced in **January, 2017**
- Tender in the evaluation stage.

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THANK YOU!

