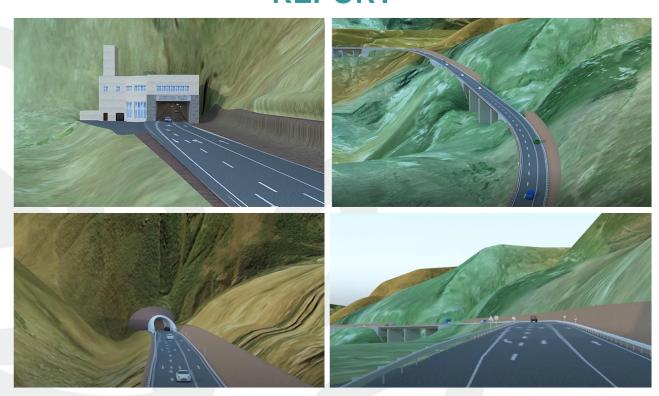


# ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA)

SISIAN-KAJARAN (NORTH-SOUTH CORRIDOR) ROAD PROJECT, ARMENIA

# ESIA DISCLOSURE AND CONSULTATION REPORT



Source: projections of the proposed road collated from the '3D description of the Sisian-Kajaran Road', Armenian Road Department, 2022 [https://www.youtube.com/watch?v=fu-dgAwjSsU]

March 2024

# ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) SISIAN-KAJARAN (NORTH-SOUTH CORRIDOR) ROAD PROJECT, ARMENIA

# ESIA DISCLOSURE AND CONSULTATION REPORT

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### LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BAP	Biodiversity Action Plan
E&S	Environmental and social
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
NGO	non-governmental organization
NTS	Non-Technical Summary
NSRC	North-South Road Corridor
RF	Resettlement Framework
RA	Republic of Armenia
RD	Road Department Fund (the Client)
SEP	Stakeholder Engagement Plan

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#### 1. BACKGROUND

The Road Department Fund (the RD) under the Ministry of Territorial Administration and Infrastructure of Armenia (the MTAI or the Promoter) is the Implementing agency for the construction of the 60 km Sisian-Kajaran road section (the Project) of Armenia's strategic North-South Road Corridor (NRSC) (Figure 1).

The Sisian-Kajaran road will be divided into three construction packages<sup>1</sup>:

- Lot 1: 27.1 km Northern road section (from 0+000 km to 27+130 km);
- Lot 2: 8.64 km Bargushat tunnel (from 27+130 km to 35+770 km); and
- Lot 3: 24.2 km Southern road section (from 35+770 km to 60+022 km).

The European Bank for Reconstruction and Development (EBRD) is considering providing a sovereign loan to the Republic of Armenia (the Borrower or the RA) to finance Lot 3: 24.2 km Southern road section (the EBRD Project). The European Investment Bank (EIB) is expected to co-finance the Southern road section (Lot 3). Lot 1: the Northern road section and Lot 2: Bargushat tunnel are expected to be financed by the EIB, the Asian Development Bank (ADB), and the Government of Armenia.

The Sisian-Kajaran section is one of several sections of the Armenian part of the NSRC in the southern part of the country. The current road H45 connecting Sisian and Kajaran via Tatev and Kapan is approximately 130 km long (Figure 1). Despite the maximum speed of 90 km/hour, the travel time takes about 3-4 hours due to difficult mountain terrain. In the aftermath of the 2020 war between Armenia and Azerbaijan the previously used connection via the M2 road between Goris and Kajaran is not usable for Armenia citizens. To this end, it is proposed to construct a ~60 km greenfield Sisian-Kajaran section of the NSRC (Figure 1). The development of the NSRC is a key infrastructure priority for the Government of Armenia.



Source: prepared by Ecoline International Ltd. and ATMS Solutions Ltd.

Figure 1. Location of the Sisian-Kajaran Road Project (Syunik Region, Armenia)

<sup>&</sup>lt;sup>1</sup> The indicated lengths are preliminary. The final lengths of the sections will be determined after the detailed design is split into three sections; it is anticipated that while the length of the Bargushat tunnel remains the same, several kilometres will be added to it at the portals, thus reducing the lengths of the Northern and Southern sections.







According to the environmental and social (E&S) requirements of the EBRD, ADB and EIB (the Lenders), a formalised and participatory Environmental and Social Impact Assessment (ESIA) process was conducted for the Project by a consortium of E&S consulting companies (the ESIA Consultant)<sup>2</sup>. During this process, the draft ESIA package was prepared and disclosed for the period of over 120 days<sup>3</sup>: from 21 July 2023 to 1 December 2023 (inclusively).

In line with the RD's commitments contained in the Project's Stakeholder Engagement Plan, this *ESIA Disclosure and Consultation Report* was prepared to document and summarise the feedback from stakeholders received and engagement activities completed during the ESIA disclosure period.

#### 2. OVERVIEW OF THE ESIA DISCLOSURE DOCUMENTS AND ARRANGEMENTS

The ESIA disclosure package included six documents, each in the Armenian and English languages:

- ESIA report, including an Environmental and Social Management Plan (ESMP);
- Non-technical Summary (NTS);
- Stakeholder Engagement Plan (SEP);
- Environmental and Social Action Plan ESAP);
- Biodiversity Action Plan (BAP); and
- Resettlement Framework (RF).

The announcement about the 120-day disclosure period was published (in English and Armenian) on the website of the RD on 21 July 2023 (refer to Annex 1):

- Armenian: https://armroad.am/am/news/inner/News\_21.07.2023,
- English: <a href="https://armroad.am/en/news/inner/News\_21.07.2023">https://armroad.am/en/news/inner/News\_21.07.2023</a>.

The RD also posted the announcement at their 'News' page at Facebook (see Annex 1).

In parallel with this, the EBRD announced the disclosure on its website at <a href="https://www.ebrd.com/work-with-us/projects/esia/northsouth-corridor-sisiankajaran-road-project.html">https://www.ebrd.com/work-with-us/projects/esia/northsouth-corridor-sisiankajaran-road-project.html</a>.

The printed versions of the ESIA package documents were made available for the public at:

- Road Department Fund at Government Building 3, 1st floor, Republic Square, Yerevan 0010, Armenia;
- Sisian Community Administration, Sisakan St. 31, 3501 Sisian, Armenia;
- Kajaran Community Administration, Lernagortsneri St. 4, 3309 Kajaran, Armenia; and
- EBRD country office at Piazza Grande Business Centre, 2nd floor, rooms 95-97, 10 Vazgen Sargsyan Street, 0010 Yerevan, Armenia.

In addition, the NTS was printed out by the ESIA Consultant and delivered to the Project-affected villages to ensure easy access for local residents. Thus, the NTS was available at the administration buildings of:

Ishkhanasar Administrative Unit, Ishkhanasar Settlement, Sisian Community;

The EBRD requires that the disclosure would be for minimum 120 days. A 130-day disclosure period was applied to the Project to allow for inclusion of late comments, if any.







<sup>&</sup>lt;sup>2</sup> The consortium encompasses Ecoline International Ltd. (Bulgaria), SE Solutions Pty. (South Africa) and ATMS Solutions LLC (Armenia) and is supported by Biotope (France) and Biogeotech (Armenia) for biodiversity component.

- Aghitu Administrative Unit, Aghitu Settlement, Sisian Community;
- Noravan Administrative Unit, Noravan Settlement, Sisian Community;
- Vaghatin Administrative Unit, Vaghatin Settlement, Sisian Community;
- Vorotnavan Administrative Unit, Vorotnavan Settlement, Sisian Community;
- Darbas Administrative Unit, Darbas Settlement, Sisian Community;
- Getatagh Administrative Unit, Getatagh Settlement, Sisian Community;
- Lor Administrative Unit, Lor Settlement, Sisian Community, Armenia;
- Shenatagh Administrative Unit, Shenatagh Settlement, Sisian Community;
- Lernadzor Administrative Unit, Lernadzor Settlement, Kajaran Community;
- Geghi Administrative Unit, Geghi Settlement, Kajaran Community.

On top of the above-mentioned ESIA package, the Project ESIA Leaflet was prepared prior to the consultation meetings and disseminated during them, as described below (for the ESIA Leaflet refer to Annex 2).

#### 3. OVERVIEW OF THE ESIA CONSULTATION EVENTS AND ARRANGEMENTS

Nine consultation meetings were held during the ESIA disclosure period (Table 1), of which:

- Six meetings took place in the Project Area in the settlements of Sisian, Aghitu, Darbas, Lor, Kajaran, and Geghi to engage residents of the affected settlements, local and municipal authorities, regional branches of the government, local/regional civil society / non-governmental organisations, and other local stakeholders, and
- Three meetings were held in Yerevan for the central authorities, Yerevan-based civil society / non-governmental organisations and any interested stakeholders.

The planned consultation meetings in the Project Area settlements were announced via:

- Official letters of invite issued to the Sisian and Kajaran Communities, heads of the administrative units in the Project-affected area;
- the Aravot Newspaper (Annex 3, A);
- the RD website: <a href="https://armroad.am/am/news/inner/News\_13.09.2023\_1">https://armroad.am/am/news/inner/News\_13.09.2023\_1</a> (Annex 3, B); and
- notifications at the Information Boards of the Community Administrations (for an example refer to the bottom photo in Summary of Meeting in Sisian, Annex 5)

The consultations in the southern part on the proposed road (Kajaran and Geghi) were initially planned for 20 September 2023; however, they had to be postponed due to safety reasons<sup>4</sup> and took place on 2 November 2023. The meetings in Kajaran and Geghi were re-announced via the RD website (Annex 3, D) and the Aravot Newspaper (Annex 3, E).

The planned consultations in the City of Yerevan were announced via:

- Official letters of invite issued to the state bodies and Yerevan-based civil society / non-governmental organisations (as per the Stakeholder Register maintained for the Project);
- the RD website (Annex 4):
  - o Armenian: <a href="https://armroad.am/am/news/inner/News\_24.10.2023">https://armroad.am/am/news/inner/News\_24.10.2023</a>,

<sup>&</sup>lt;sup>4</sup> Escalation of the military situation at the border between Armenia and Azerbaijan (Annex 3, C).







- o English: https://armroad.am/en/news/inner/News\_24.10.2023.
- the ESIA Consultant's website https://atms.am/public-consultations/.

The preparation for the meetings was associated with extensive organisation and expert work. For instance, follow-up calls were made by the RD staff and ESIA Consultant to verify if the invitation letters and emails had reached the addressees and to re-confirm the agenda of the meetings, as well as to encourage women participation in the events. The ESIA team in the meantime kept developing event-specific presentations, ESIA Leaflets, and other supporting materials.







Table 1. ESIA Consultation Meetings held between 21 July and 1 December 2023

No.	ESIA meetings	Date	Time	Topics	Materials prepared	Number of participants <sup>5</sup> (women)	Ref. to Annex
1.	Sisian Community Administration Building (villagers from Ishkhanasar were invited to Sisian)	19 September	11.00	General ESIA meeting with a focus on specific	ESIA Leaflet, simplified ESIA presentation,	18 (9)	Annex 5
2.	Aghitu Administrative Unit Building (villagers from Noravan, Vorotnavan and Vaghatin are invited to Aghitu, but can attend in Sisian if they wish so)	2023	earlier (cattle passages, relevant cultural noise, vibration, cultural heritage sites, maps	20 (16)	Annex 6		
3.	Darbas Administrative Unit Building (villagers from Shamb and Getatagh were invited to Darbas)		16.00	heritage, benefits)	with the cattle crossings, etc.	13 (6)	Annex 7
4.	Lor Administrative Unit Building (villagers from Shenatagh were invited to Lor)		17.30			16 (6)	Annex 8
5.	Yerevan, Ramada Hotel (Pavstos Buzand str. 15) with Zoom support <sup>6</sup>	25 October 2023	14:00	General ESIA meeting for state bodies, NGOs and any interested stakeholders	ESIA presentation with greater level of details across all E&S topics	33 (15)	Annex 9
6.	Yerevan, Ramada Hotel (Pavstos Buzand str. 15) with Zoom support	26 October 2023	14:00	Biodiversity meeting with relevant state bodies and NGOs	Dedicated presentation on biodiversity surveys, impacts and mitigation	26 (14)	Annex 10
7.	Yerevan, Ramada Hotel (Pavstos Buzand str. 15) with Zoom support	27 October 2023	14:00	Cultural heritage meeting with relevant state bodies and NGOs	Dedicated presentation on cultural heritage studies, impacts and mitigation	22 (14)	Annex 11
8.	Kajaran Community Administration Building (villagers from Kavchut and Dzagikavan were also invited to Kajaran)	2 November 2023	14.00	General ESIA meeting with focus on specific issues of interest voiced	ESIA Leaflet, simplified ESIA presentation, maps with settlement -	27 (12)	Annex 12
9.	Geghi (villagers from Getishen and Nor Astghaberd are invited to Geghi)	2 November 2023	16.30	earlier (cattle passages, noise, vibration, cultural heritage, benefits)	relevant cultural heritage sites, maps with the cattle crossings, etc.	27 (12)	Annex 13

<sup>&</sup>lt;sup>6</sup> All Yerevan meetings were held in a hybrid mode (offline with the Zoom support and engagement of simultaneous interpreters to allow for attendance by non-Yerevan based E&S specialists of the EBRD, ADB and EIB, as well international staff of the ESIA consultant).







<sup>&</sup>lt;sup>5</sup> Including the representatives of the Lenders, RD and ESIA Consultant.

In addition to the above and separately from the ESIA process, the RD commissioned the national Environmental Impact Assessment (EIA) procedure. As part of it, four rounds of EIA consultations were held according to the Armenian legislation (in April, June, August, and November 2023)<sup>7</sup>. The feedback and comments collected by the RD's national EIA consultant and by the Ministry of Environment were analysed by them and included in the final version of the EIA report available at <a href="http://env.am/storage/files/geghi-25-10-2023.pdf">http://env.am/storage/files/geghi-25-10-2023.pdf</a>. The positive Environmental Permit ('the EIA Conclusion') was issued for the Project by the State Environmental Expertise body (Ministry of Environment) on 27 November 2023 (refer to <a href="http://env.am/storage/files/207-transh-4-optimized.pdf">http://env.am/storage/files/207-transh-4-optimized.pdf</a>).

#### 4. FORMAT OF CONSULTATION MEETINGS

The meetings lasted from 40 minutes to almost two hours depending on the number of questions raised. Each meeting had approximately a similar agenda:

- Opening of the meeting and introduction of its objectives and key speakers;
- PowerPoint presentation covering:
  - Project introduction and overview;
  - Objectives of the meeting:
  - Results of the draft ESIA (with either a general coverage or a specific thematic focus depending on the target audience in terms of baseline studies, impact assessment and mitigation and management; in addition, with consideration of issues that were raised earlier in specific settlements);
  - o Stakeholder engagement and grievance mechanism, with contact details;
  - Summary and outlook.
- 'Questions and Answers' session (some questions were also raised and responded during the presentation).
- Closure including a reminder that comments are invited until 1 December 2023 at the contacts indicated in the ESIA Leaflet, RD website, in the presentations, and the Non-Technical Summary report available in the villages.

The key delivered presentations, namely: general E&S presentation, biodiversity presentation, and cultural heritage presentation, are attached to this report in **Annex 14**.

<sup>&</sup>lt;sup>7</sup> The questions raised by the participants during the ESIA and national EIA public consultation meetings were largely similar.







#### 5. SUMMARY OF CONSULTATION MEETINGS

**Table 2** synthesises the results of the nine consultation meetings on the draft ESIA package disclosed for 130 days (from 21 July to 1 December 2023). It also presents additional information in response to the voiced questions or suggestions and indicates whether changes have been made to the ESIA documents. After the changes capturing the feedback from public consultations have been incorporated in the ESIA package, it will be re-disclosed in line with the Project SEP.

Table 2. Synthesis of key issues and responses from ESIA consultation meetings and inclusion in the updated ESIA documents

Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
Sisian, Kajaran, Yerevan (general)  Amount of spoil and location of spoil disposal areas (SDAs)  Proposal voiced to move the spoil to the nearby valleys, build small-scale parks, plant trees, and provide water supply to these parks	About 14 million m³ of spoil is expected to be generated. Various locations were studied in the Project region, of which eight were selected as spoil disposal areas (SDAs).  Later, in the ESIA process, some of these locations were excluded due to various reasons, for instance, SDAs identified in the Kajaran area were found to be sensitive in terms of biodiversity. Instead, the technical consultant of the Project proposed a new location in the Shenatagh area, near the northern portal of the Bargushat tunnel. This new SDA was preliminarily approved by the Sisian Community Administration. Another SDA was proposed near the southern portal in the eastern part of abandoned Qirs village and this location was preliminarily approved by the Kajaran Community Administration.  The Project envisions tree planting works that will be carried out by a specialised contractor in consultation with the community. When planning such works, it may be possible to consider the community's proposals about specific use of spoil for creating parks.	The initially proposed SDAs are discussed in Project Description, ESIA Volume 1, these SDAs were reviewed from the E&S point of view and some were scoped out. Three additional / alternative SDA locations were proposed in 'Section 3.9. Alternative Locations of SDAs, ESIA Volume 1. The RD obtained preliminary consents from the Sisian and Kajaran Community Administrations for the newly proposed SDAs in the Shenatagh and Qirs Valleys, respectively. The third proposal was about the use of the Voghji Tailing Facility as a SDA. Several months ago it was preliminarily agreed with the Ministry of Environment that is in charge of this facility that the use of the tailings facility as a SDA is possible and the topic is to be revisited as the Project progresses.  Further action 1: All SDAs required for the construction must be agreed with the community authorities by the Construction Contractor, and actions set out in the Project's Environmental and Social Management Plan in relation to the SDAs be implemented.  Further action 2: Use of spoil for levelling terrain and creating parks / green spaces: the RD will continue engaging with the Sisian community to i) determine locations for such parks and ii) discuss a potential for merging this activity with the RD's obligation to plant trees in lieu of the cut trees (non-private).  Further action 3: The RD will continue engaging with the Ministry of Environment about the use of the tailing facility as a SDA as the Project progresses to actual works on site.	Information about the preliminary consents added to ESIA Volume 1.  Engagement topics relative to tree-planting and use of spoil for community purposes, as well as the use of the Voghji Tailing Facility as a SDA, added to the SEP.
Sisian:  Reasons for selecting the preferred road	Three options of the road alignment were considered and all options were studied in detail by archaeologists. The most acceptable option from a variety of perspectives was chosen. 76 historical and cultural monuments were identified along the	Section 3, Analysis of Alternatives, ESIA Volume 1 reviewed the alternatives within the Project, including the alternative route, and explained the reasons for selecting the preferred one. This alternative was preferable in terms of its comparatively smaller potential for land	No changes to the ESIA documents.







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
alignment, given that many used land plots and several cultural heritage sites are affected	project, most of which are expected to be affected to various extent. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation. In addition, measures to minimize the impact of vibration on historical and cultural monuments during the construction are proposed in the ESIA.	acquisition and resettlement, as explained in the <b>RF</b> and <b>Resettlement Plan.</b> The analysis of alternatives from the cultural heritage perspective was completed during the Project feasibility study in 2016 (performed to the ADB requirements) and reconfirmed in the ESIA process. The national EIA reports that obtained positive conclusions of the State Environmental Review in March 2018 and November 2023 (including a review and approval by the Ministry of Culture (earlier) / Ministry of Education, Science, Culture and Sport – (nowadays)).	
Sisian, Darbas Start date of the road construction work	The public consultations will finish on 1 December 2023, based on these the ESIA package will be updated and presented to the RD to organize further processes.  The works are planned to start in the spring of 2024, but since it is currently in the design phase, discussions are being held with financing banks. After the discussions, the financing phase will follow, after which the works will start.	The SEP notes that the construction is planned to start in 2024. No exact date can be determined at present. No works will start on the private land until compensations are paid (as stipulated in the PF, Resettlement Plan and other Project E&S documents). All settlements will be notified about the start on the construction in their area in advance via announcements in the mass media, RD website, Information Boards of the local administrations, press releases, etc. (refer to 'Notification on the start of the construction work', Action 10, SEP).	No changes to the ESIA documents.
Sisian Risk of polluting rivers crossed by the road	Oil traps will be installed at all important locations to prevent oil from cars leaking into the water environment. Bridges are arranged over the rivers.	Assessment of impacts on rivers (surface water resources) was completed as part of the ESIA (refer to <b>Section 3.5, ESIA Volume 3</b> ). Specific mitigation measures for the construction and operational phases were proposed to minimise potential impacts, as well as tailored monitoring schemes (see the <b>ESMP</b> ).	No changes to the ESIA documents.
Sisian  Accidental damage of infrastructure in the settlements due to implementation of the construction works  Geghi  Accidental damage of agricultural products during construction	Apart from infrastructure improvement works, the latter are not expected to be affected, as all necessary measures for infrastructure maintenance are envisioned. Usually, in the international contracts signed with the construction contractor, there are mandatory clauses that require restoring to the original state all the infrastructure that have been damaged or affected to some extent during the construction.  Construction Contractor must reach an agreement with the owners of the affected assets and compensate for any damage incurred due to construction works. Only permanently affected land is eligible for compensation based on the inventory and	As specified in <b>ESIA Volume 4</b> and <b>ESMP</b> , Construction Contractor will develop and implement the Utilities Protection and Relocation Plan. Furthermore, following construction, Construction Contractor will rehabilitate public roads used by the Project to the pre-project or better condition.  The RF states that the damage caused by the Contractor (or subcontractor) during the construction works will be compensated at full replacement cost (which is the market value of the assets plus transaction costs) in accordance with the principles of the RF.	No changes to the ESIA documents.
Sisian	valuation processes.  The project design envisages the construction of the road only. As for the future, it is expected that such road-side	The RD is aware of the point.	Engagement topic relative to the







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
Plans to build shopping or recreation points next to the operational road	infrastructure may develop and those proposals will definitely be taken into account at certain stages of the construction works, as they will help increase the living standards of the community or ensuring employment.	<b>Further action 1:</b> the RD will continue engaging with the local stakeholders about the development of the road-side infrastructure as the Project progresses.	development of the road- side infrastructure added to the <b>SEP</b> .
Aghitu, Lor, Kajaran  Timing of the implementation of land acquisition, demonstration of overlay of the road with land plots, assistance with obtaining inheritance rights during implementation	The Project will be implemented by the RD foundation. The RD's Social Department will deal with the land expropriation and compensation, and address complaints. The construction works will probably start in spring of 2024. Before that, detailed surveys of the lands to be expropriated will be carried out by a specialized company. The persons whose lands are subject to expropriation can use their lands before the construction works start. The size of affected lands will be in the contract. Lawyers of the relevant consulting organization will help with inheritance acceptance, and appropriate payments will be made at the expense of the Project budget. Resettlement information leaflets were distributed to the residents during the pre-survey resettlement public consultation meetings in December 2021, in which all the stages of the above are reflected. The last page of the leaflet contains all the necessary contact information for making suggestions and complaints.	Principles and details of the land acquisition process, as well as the compensation and livelihood restoration entitlements are contained in the RF. Further details will be proposed in the Resettlement Plan that is being prepared for the Project. To note: the Resettlement Plan will be disclosed and due compensation paid to affected persons before any works occur in relation the Project.	No changes to the ESIA documents.
Aghitu  Noise experienced from the existing road; concerns about construction traffic	During the construction and further operation of the Project, noise mitigation measures will be applied, particularly in the areas where the road will pass near the settlements, noise-absorbing barriers will be installed, which will significantly reduce the impact of noise on the neighbouring settlements/houses.	Section 3.2. Noise and Vibration, ESIA Volume 3 looks specifically into the issues related to noise at the construction and operation phases of the Project. Noise modelling was performed for the Project for both day and night time, and for the with and without noise attenuation scenarios. Relevant mitigation and monitoring measures were developed (ESMP and ESIA Volume 3) to be implemented by the Construction Contractor and the RD during the construction and operations.	No changes to the ESIA documents.
Darbas Orphan land; land plot divided into two parts by the road	Tailored solutions are sought.	The RF's Entitlement Matrix stipulates that 'If a land plot cannot be used per its designated purpose as it becomes economically unviable or inaccessible, then the whole land plot is acquired at full replacement cost.' Each individual case is studied during the ongoing preparation of the Resettlement Plan and solutions are proposed to be further detailed and delivered during the implementation of the Resettlement Plan.	No changes to the ESIA documents.
Lor	The passages that are technically feasible will be built. The location of the passages can be proposed by Lor settlement as a result of a joint discussion. The proposals put forward by the residents along the whole route were discussed with the	4 passages for agricultural vehicles and 5 cattle crossings (all underpasses) are envisioned by the design (see <b>ESIA Volume 1</b> ). On top of this villagers proposed 20 additional cattle and vehicle passages along the whole route. Annex 3 of the ESMP ( <b>ESIA</b>	Clarification is added to the ESIA: ESMP Volume 6 and Social Volume 4 that the FIDIC Yellow







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
Cattle and agricultural vehicle passages	technical and design teams and the preliminary solutions are to extend the designed culverts that are located within 200-250m from the proposed passage sites; as well as to pass under the bridges.	Volume 6) contains the detailed locations of additional passages for cattle as proposed during the interviews and consultations at the affected settlements, as well as the technical assessment of their feasibility. The RD will ensure the cattle passages are arranged at the due locations. The SEP includes engagement on cattle passages (Action 7, SEP programme)  Further action 1: The RD to ensure that the Construction Contactor addresses proposals in relation to agricultural crossings in a participatory manner.	Book will be used by the RD to allow to deliver all proposed mitigation in relation to cattle crossings. Similar information was added to the <b>BAP</b> in relation to wild animal passages.
Lor Safety of houses in case of rockfalls during the construction	Appropriate measures will be planned to ensure safety, including, for example, netting and fencing of rockfall areas. Alienation can also be considered as an alternative. Tailored technical solutions will be developed for each specific case.	Site-specific construction and environmental management plans will be prepared by the Construction Contractor with due actions to protect the environs and private assets. Geohazards assessment is currently ongoing and will inform such plans, In addition, the Construction Contractor will develop and implement a Community Health and Safety Plan. Prior to construction work, early notification and engagement with the residents will take place. Continuous visual observations of the areas around the construction sites will be part of the routine monitoring. Grievance mechanism will continue to be at the disposal of the residents to raise any concerns with the RD, local authorities and/or the Construction Contractor. In addition, the Supervision Engineer will monitor the performance of the Project's Grievance mechanism.	No changes to the ESIA documents.
Lor Inconsistencies in cadastral maps and description protocols	Land surveys are still ongoing. You will sign the version of the description protocol with which you fully agree. In addition, there is a grievance mechanism that allows residents to submit their questions, suggestions and complaints at any time. All cadastral deviations will be corrected during the project implementation phase. But it is not possible in all cases. If the deviation is large and refers to the entire settlement, then other principles apply, for example, the method of correcting this deviation at the expense of communal land, etc.	The resettlement team of the E&S Consultant continues working in the field; during October – December 2023 over 480 description protocols were agreed with the owners and signed. Each signing process is associated with detailed review of the cadastral maps, completed measurement results, prepared layouts, and other supporting documents.  Further action 1: The E&S Consultant will conduct public consultations on the draft Resettlement Plan in early 2024.  Further action 2: Any unresolved issues will be further tackled during	No changes to the ESIA documents.
		the Resettlement Plan implementation stage.	
Darbas Access to cultural heritage sites	The residents have noted that they visit almost all historical and cultural places in the area, and that they believe that there will be no obstacles to access those places, and if there are, it will be temporary.	Sections 3.8 and 3.9 of ESIA Volume 4 look into the issues of access to cultural heritage sites. The draft Cultural Heritage Management Plan has been developed that will ensure that, if the project site contains cultural heritage or prevents access to previously accessible cultural heritage sites, the Contactor will, based on	No changes to the ESIA documents.







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
		documented consultations with users of the site, allow continued access to the cultural site, or will provide an alternative access route, subject to overriding health, safety and security considerations.	
Yerevan (general) Types of affected land	The lands included in the design of the planned are communal, private and forest (state) lands.	Out of the affected land, around 12.2% are privately owned, 19.2% - state-owned, and 68.7% - community-owned. Further information about the type and ownership of affected land plots can be found in <b>Section 3, ESIA Social Volume 4</b> . This information is being updated as the cadastral maps have changed recently. In the future, the updated information will be provided in the draft Resettlement Plan to be disclosed potentially in early 2024.	No changes to the ESIA documents.
Yerevan (general)  Availability of the national EIA Conclusion for the Project	The EIA Conclusion was received in 2018, however, since it expired one year after the date of approval, the national EIA process for the Project is currently being carried out again.	The RD re-launched the EIA in March 2023. The new EIA Conclusion was obtained by the RD on 27 November 2023 (see <a href="http://env.am/storage/files/207-transh-4-optimized.pdf">http://env.am/storage/files/207-transh-4-optimized.pdf</a> ).	An update about the obtained Environmental Permit included in the SEP, NTS and ESIA Volume 1.
Yerevan (general), Yerevan (biodiversity) Cutting of trees on forest land - process and compensations  Types of trees to be cut, number of them registered in the Red Book	6 trees will be planted instead of each cut tree with a diameter greater than 10 cm, and 10 trees will be planted for each tree included in the Red Book. After recognizing these lands as a superior interest, the construction contractor company will receive a permit to cut down these trees during the construction work. In lieu of the trees to be cut, tree planting works will be carried out in the areas indicated/selected by the state. The number and type of re-planted trees will depend on the number and type of trees being cut. Preference will be given to local species. Planting works will be carried out in accordance with national and international standards by the specialised contractor.  Counting was done in the target locations. Only one type of Juniper is registered in the RA Red Book, but it does not grow in the area of the Project. There are other tree species registered in the RA Red Book, for example, bell-shaped hawthorn, pear species, but they are rarely found in the area of the Project. In general, very few of the trees registered in the RA Red Book fall in the road construction zone.  The national EIA report defined how many trees will be cut in which area, as well as suggested mitigation. Biodiversity issues	The EIA Conclusion (Nov 2023) states that the cut trees and shrubs will be re-planted at the ratio of 1 to 6, and if the Red Book species are affected, the ratio of 1 to 10 will apply.  As per the national EIA report, the approximate number of trees and shrubs to be cut is 6,068 and about 10,000, respectively. But the counts were estimated in 2016 and will need to be verified prior to the construction works, as well as the re-planting cost estimate.  The EIA Conclusion also requires that the affected state forest fund land would be re-planted. The Project affected forest area is 29.4 ha and the potential re-planting rate could be 1 to 2 as per the national regulations. The rate / area of re-planting is being currently determined by the responsible state bodies (as of January 2024), as the approval conditions in the EIA Conclusion are being re-confirmed.  The Project's BAP applies a surface-based approach for off-setting impacts on the priority biodiversity species and critical habitat. The BAP approach and EIA Conclusion's approach (which is based on an individual count) will be merged at the stage of the Biodiversity Offset Management Plan (BOMP) development, when the details of the restoration and offset sites are known. The BOMP implementers will monitor the number for each species of trees and shrubs planted in the framework of habitat restoration (per the BAP) and will take this number into consideration in the framework of the compensation for	This information is added to ESIA Volume 2, where it was explained earlier that the count of the trees is part of the national EIA scope (as there is an established national replanting practice that is documented in the EIA Conclusions for projects). Information also added to the ESMP (the replanting budget has been added to the ESMP cost estimate based on the assumption that around 100,000 trees and shrubs will be planted at the area of 60 ha (which is twice the affected forest area (29.4 ha)).







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders		changes in the updated
	in wider terms, with a focus on critical habitats and species, are covered in the ESIA with additional mitigation.	the plantation according to the EIA Conclusion (i.e., the relevant part of the BAP commitments will be integrated into the plantations to reach the targets 1 to 10 for the Redbook species and 1 to 6 for other species). It should be noted that the affected trees and crops on the private lands will be compensated to the affected persons at full replacement cost. The affected persons will also be eligible to take the timber wood (cut on their affected land plots) for own use.	Additional information and clarifications of the approach to meeting the offsetting and compensation commitments of both the BAP and EIA Conclusion included in the BAP.
Yerevan (general)  Tunnelling methods, why not to use alternative methods to blasting	The blasting method will be used for the construction of the tunnels.  Alternative methods require special equipment. It takes a lot of time and a lot of money to find and bring such equipment to Armenia. Even if the equipment is acquired, it will take months to transport it to the intended site of operation due to the narrow and difficult roads, the steep terrain of the region, and the sheer volume of equipment to be transported. It should also be taken into account that not one but several tunnels will be built and that equipment will need to be moved between many sites.	Section 3.8. Alternative Tunnel Design and Construction Methods, ESIA Volume 1, compares two primary options for tunnel boring using a tunnel boring machine and drill-and-blast. Both methods have cons and pros. For pragmatic reasons, the drill-and-blast is preferred. Though, the appointed contractor will ultimately decide on the tunnel excavation method.	No changes to the ESIA documents.
Yerevan (general)  Availability of the state comprehensive examination conclusion; consideration of seismicity and geohazards.	The Project passed the state comprehensive examination in 2020. The design was developed considering the seismic conditions and in line with the national and international standards. Detailed geological studies are ongoing that are accompanied with risk assessment and modelling of geohazards.	For the conclusion of the state comprehensive examination refer to <a href="https://www.arlis.am/DocumentView.aspx?DocID=142958">https://www.arlis.am/DocumentView.aspx?DocID=142958</a> .  ESIA Volume 3, Section 2.3. reviews the baseline geohazards in the Project area, as well as seismic conditions. The road alignment will run through only the 1st (Sisian-Shenatagh section and Bargushat tunnel) and 2nd (Qirs-Kajaran section) seismic zones. Thus, the Project is not within the most seismic zones of Armenia. The Project is designed to sustain 9.0 magnitude seismic impact. ESIA Volume 3, Section 2.3. contains impact assessment in terms of geology and provides requirements for additional geological studies, which are also included in the ESMP (ESIA Volume 6).	No changes to the ESIA documents.
Yerevan (biodiversity) Impacts on natural monuments	As a result of the study, the natural monuments that are located within the Project's Area of influence were identified and mapped. We will send the volume and section of the ESIA report in which the noted information is given. (NB: The information was sent after the meeting).	Information about the natural monuments of the region is presented in <b>Section 2.10.2 of the ESIA Volume 3</b> .	No changes to the ESIA documents.

<sup>&</sup>lt;sup>8</sup> RA government decision No. 870-A dated 27.05.2020 On approval of the conclusion of the special comprehensive expert examination of the detailed design document for Tranche 4 - Sisian-Kajaran road section within the North-South Corridor Investment Program. <a href="https://www.arlis.am/DocumentView.aspx?DocID=142958">https://www.arlis.am/DocumentView.aspx?DocID=142958</a>.





Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	Additional information and Project actions in response to engagement	References to the changes in the updated ESIA documents
Yerevan (biodiversity)  Need to change the designated purpose of forest land crossed by the road	All coordinates of lands subject to expropriation, as well as the categories of lands subject to change in designated purpose, are indicated in the Governmental Eminent Domain Decree.	Detailed information will be provided in the Resettlement Plan that is under preparation. The overall approach is that the designated purpose will change only for the sections through which the proposed highway will pass.	Not applicable as this topic will be addressed in the Resettlement Plan.
Yerevan (biodiversity)  Number of migration route envisioned in the design and principles	Several wildlife passages proposed, do not remember exactly. But the principle of choosing the passages is as follows: throughout the year the surveys were carried out and camera monitoring was used, as a result of which almost all migration routes used by animals became clear. The areas with intensive migration were identified and the locations were documented.	No green bridges or wild animal crossings were included in the detailed design, but the need for them emerged from the biodiversity assessment (see <b>Annex 4, ESIA Volume 2</b> for the list of proposed wild animal crossings). In total, 10 wild animal crossings are proposed and the RD will oblige the Construction Contractor (contracted under the Yellow FIDIC Book) to implement these proposals.	No changes to the ESIA documents.
Yerevan (biodiversity) Use of camera traps to capture the fauna baseline and their future use Suggestion to restore the cameras and do 'live' monitoring	Data collected by the cameras are archived and accessible.  As for future monitoring with cameras, these cameras can be installed in the same manner and in the same places to carry out continuous monitoring. To be on the safe side, the cameras are currently removed from the site, but they may be reinstalled in the future for monitoring purposes.	The BAP envisions using camera traps as part of the monitoring during both, the construction and operations (refer to <b>BAP</b> , mitigation <b>RD15</b> and monitoring programme in <b>Section 9</b> ). Further, for the Priority Biodiversity Features and Critical Habitats, it is proposed to establish a long-term monitoring through camera-trapping jointly with national and local key stakeholders (e.g., WWF, Zangezur Biosphere Complex, Caucasus Nature Fund, Hydrometeorology and Monitoring Centre SNCO and other) to monitor habitats and so-called "umbrella" species which will also be good indicators of habitat quality.	No changes to the ESIA documents.
Yerevan (biodiversity) Impact on the rivers and streams	No changes expected in the course and direction of rivers and creeks as a result of the Project implementation. Bridges will be built over the rivers, thereby avoiding the change of the course of the rivers.	Assessment of impacts on rivers (surface water resources) was completed as part of the ESIA (refer to <b>Section 3.5</b> , <b>ESIA Volume 3</b> ). Specific mitigation measures were proposed to minimise potential impacts, as well as tailored monitoring schemes (see the <b>ESMP</b> ).	No changes to the ESIA documents.
Yerevan (biodiversity) Biodiversity monitoring and control over mitigation measures; involvement of state stakeholders in monitoring	Control and monitoring of activities of the contractors through appropriate management plans will be an obligatory provision of the contract. There will be the technical supervision engineer in change of monitoring. As this Project is considered very "sensitive", monitoring will be carried out by an independent external company, affiliated with neither the construction contractor nor the RD. For this purpose, terms of reference will be prepared and a tender will be announced. Eligible and qualified organisations can apply for participation in the tender.	Monitoring actions and responsibilities covered in ESIA Volume 2 and BAP, as well as the ESMP.  The ESMP stipulates that the staff of both the Supervision Engineer and the Construction Contractor should include a Biodiversity Specialist with international experience / experience with lender requirements. In addition, biodiversity experts will be hired via tenders to implement various mitigation and off-setting / compensation actions as per the BAP.	No changes to the ESIA documents.
Yerevan (biodiversity)	"Hayantar" SNCO is indeed not mentioned in the presentation, but the term "relevant departmental bodies" mentioned in the report implies the involvement of "Hayantar" SNCO as well.	Sisian Forestry and Kapan Forestry branches under "Hayantar" SNCO have been actively engaged and consulted with since the start of the ESIA process. "Hayantar" SNCO is present in the Stakeholder Register of the Project (refer to <b>Table 2</b> , <b>Section 5</b> , <b>SEP</b> ). As	No changes to the ESIA documents.







Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	engagement	References to the changes in the updated ESIA documents
"Hayantar" SNCO in not listed among stakeholders		explained in the SEP, any stakeholders can contact the Project contact points for inclusion in the Stakeholder Register.	
Yerevan (cultural heritage)  Which sites are affected; need for additional studies with an individual approach to each site; determination of protection zones	The Project deals with both, the existing and newly discovered cultural heritage sites. Most of the existing sites do not have protection zones. Whereas, the new ones are yet to be registered to obtain a 'status'. During the implementation of this Project, newly identified sites should get a status, and protection zones should be defined for the old (existing) sites. In order to do this, the Ministry should have the results of additional surveys for each site. This work will be done, based on the information about all identified monuments included in the report, and after the selection of the construction company. Mitigation measures have been developed for each monument, and appropriate budget and mitigation plan have been established.	ESIA Volume 4, Section 2.3 presents detailed information on the cultural heritage baseline and completed archaeological surveys. Table 9 therein indicated the 'Potential to be impacted' for each of the 54 sites (76 units). Assessment of impacts is documented in Sections 3.8 and 3.9. Mitigation is presented in the ESMP, ESIA Volume 6 and further detailed in the draft Cultural Heritage Management Plan.  Registration of new sites is part of the mitigation, namely the Construction Contractor should "Coordinate, with support of the RD, with the Ministry of Education, Science, Culture and Sport to obtain a status of registration for the discovered CH sites. Provide the information obtained from the additional surveys of the CH sites, as envisioned in Annex 9, to the Ministry to facilitate their decision-making on the registration."	No changes to the ESIA documents.
Yerevan (cultural heritage)  Coordination with urban planners	Before the start of the works, discussions were held with the communities, when the Project was still in the stage of feasibility study. Starting from the stage of feasibility study, works have been carried out with communities and regional administrations, as well as with relevant authorized bodies. As for the joint works with the urban planning committee, the project has undergone a special comprehensive examination and the urban planning committee was involved in it.	As detailed in the ESIA, in April and December 2021, interviews and consultations were held with state bodies including the Head of Urban Development (Syunik Regional Administration); Chief specialist of Urban Development Division and four Urban Development Department Specialists and Engineers (Kajaran Community Administration), and Head of Urban Development and Economic Sector Coordination Department (Sisian Community Administration) (ESIA Volume 4, Annex 1). Urban development bodies are key stakeholders as per the SEP.	No changes to the ESIA documents.
Kajaran, Geghi Request to connect the existing road near Geghi village to the Project road	The road was initially designed as a high-speed road, as a corridor. Only three intersections were planned along the entire length of the road. Specifically, there is no intersection planned in the Geghi section. It is suggested to submit a written proposal to the "Road Department" Foundation to plan a transition to a new road in the Geghi section.	The information is passed on to the RD.  Further Action 1. The RD will consider the request and provide written response to Head of Kajaran Community.	No changes to the ESIA documents.
Kajaran the community is rich in historical and cultural values and wants to develop tourism	The indirect impacts of the Project development at the operations stage will create a potential for such initiatives (presented as part of the presentation).	Section on Cultural Heritage Impact Assessment and Gender Impact Assessment ( <b>ESIA Volume 4</b> ) review potential impacts for the development of tourism in the Project area. There is a potential that can be developed by the stakeholders.	No changes to the ESIA documents.







Location  Main issues raised	Summary of initial responses by the RD, the ESIA Consultant, or the Lenders	engagement	References to the changes in the updated ESIA documents
Geghi Impact from vibration on houses during construction (rockfalls and tunnel blasting)	The zone of influence of vibration extends is about 40 m. If houses are located within 40 m from the source of vibration, houses may be affected. These issues will be considered separately during the construction phase.	A vibration modelling has been conducted for the Project (see Section 3.2, ESIA Volume 3) and due mitigation proposed in the ESMP. For instance, the Construction Contractor will develop Blasting Management Plans on a par with Noise and Vibration Management Plans, these will include a pre-construction condition survey of all structures located within 25 m from the construction sites and 100m from the tunnel portals if larger blasting charge will be used there. Supervising Engineer will implement focused instrumental vibration measurements at selected sensitive locations (such as residential buildings) during the most impacting phases of the construction works and stops works if any exceedance of standards is noted. Grievances regarding vibration or other issues can be raised as per the SEP.	No changes to the ESIA documents.







#### 6. REVIEW OF THE WRITTEN COMMENTS

**Table 3** presents the written comments received during the 130-day disclosure period (from 21 July 20 1 December 2023), provides clarifications by the ESIA team made in response to the comments, and indicates whether changes have been made to the ESIA documents.

Table 3. Written comments, responses to them and inclusion in the updated ESIA documents

Col	mments and questions received	Project Response actions and references in the ESIA documents
and Env	ginator of comments: Specially Protected Areas I Biodiversity Policy Department, Ministry of vironmental of Armenia, letter № 2/16.7/15884, 12.2023	
1.	Within the Sisian-Kajaran (North-South Corridor) area, there are a number of reptile species registered in the RA Red Book of Animals and the IUCN Red List: Armenian or Radde's viper - Vipera (Montivipera) raddei, Armenian mountain steppe viper (Vipera (Pelias) eriwanensis), Mediterranean tortoise (Testudo graeca), Transcaucasian snake (Zamenis hohenackeri), Caucasian cobra (Telescopus fallax) and of lizards long-legged skink (Eumeces schneideri) can be found.	The relevant information is available in ESIA Volume 2. Biodiversity, Section 2.3.2. Biodiversity Values, page 349. Further, impacts and mitigation measures are presented in ESIA Volume 2, Section 2.3.5 The Identified No-go Areas, 3.5.4 Disturbance from light pollution, dust emission, noise, vibration, 3.5.5 Disturbance from explosion and vibrations from blasting, 3.5.6 Increased mortality of individuals, 3.9 Synthesis of Impacts of the project before Mitigation Measures, 4.1 Assessment, 4.2 Summary of the Mitigation and Conclusions.
2.	It is necessary to add measures for the above referred reptile species to the monitoring list of mitigation measures proposed in the plan, as the list lacks any actions and amount of mitigation measures for reptiles.	Mitigation measures for reptiles were already included in ESIA Volume 2 and BAP, but not dedicated only to reptiles (e.g. AV05, RD02, RD12, and BMP5). Reformulations have been added in some of these descriptions to streamline the meaning.
3.	It should also be taken into account in the box mentioned in the Plan (page 25) that collisions with vehicles may also occur with other reptiles.	The mention of turtles has been removed from this table in the BAP and the ESIA to avoid confusion as the measure applies to various species. Please note that the impact of roadkill including reptiles is already presented on page 57 of ESIA Volume 2, as well as in the existing monitoring for roadkill (refer to BMP5 in the BAP).
4.	The above-mentioned reptile species are found in mountain steppes, rocky slopes (1700-2200 MASL) and can migrate up to 5 km for foraging and hibernation. The availability of shelters, hiding places, as well as food are the main factors in the existence of reptiles.	Such details are added to page 33 of ESIA Volume 2.
5.	Road construction works, vegetation degradation and overgrazing are the main threats that can cause the extinction of reptiles. In this sense, reduction of vegetation and destroyed biotopes endangers the existence of reptiles. Construction and dust will reduce the number of insects and rodents that reptiles use as food.	Potential impacts of dust, noise, vibration, etc. in the framework the Project (excluding overgrazing which does not seem to be linked to the Project) are discussed in ESIA Volume 2, page 56.
6.	During the construction of the road and its adjacent areas, it is important to carry out permanent monitoring of particularly endangered species of reptiles. Implementation of mitigation measures and special environmental tasks during the project implementation will contribute to mitigating the negative impact of activities on ecosystems and individual species. Relocation	Wildlife salvaging actions (including reptiles) and relocation was implicitly integrated in the pre-construction biodiversity surveys (RD12) but we tried to state this more clearly (both in ESIA Volume 2 and the BAP).  The roadkill monitoring is already included in BMP5 (BAP).  An additional measure constituting a dedicated endangered reptile species monitoring has been added to

<sup>&</sup>lt;sup>9</sup> All references to the pages in the right column of this table are to the English versions of the documents and should be found several pages behind in the Armenian versions.







Comments and	d questions received	I	Project Response actions and references in the ESIA documents
	of reptiles to safer ar n areas can also be c neasure.		the BAP as BMP 10, and the budget estimate has been updated accordingly.
RA Red Bo	ing butterfly species ro bok of animals are not t ESIA report (Table).		The comments are provided below.
Type:	Distribution in the project area	The place of residence	Procerus scabrosus fallerianus. VU in the Armenian Red Book.
Procerus scabrosus fallerianus	Kajaran	Forests and backwoods	This beetle species has not been found on the site, although considering its records in the Syunik Region, there is a likelihood that it can be found. The most
Maculinea alcon monticola	Kajaran	Dry meadows	appropriate habitat for it is covered by another red-listed species - <i>Telescopus fallax (Caucasian cobra)</i> , and the mitigation measures are targeted at the habitat anyway.
			Maculinea alcon monticola. VU in the Armenian Red Book.
			This butterfly species has not been observed on the site, although its host plant was recorded. Its habitat is covered by another Red-listed species <i>Brenthis ino</i> and the mitigation measures are addressed for the habitat anyway.
aserbeidso is not listed species is names of	sted to remove the narchanus from the text, but in the RA Red Book also absent from the the Global Biodive tps://www.gbif.org).	pecause the latter of Animals. This e list of accepted	Polyommatus aserbeidschanus is a taxonomically valid (although not yet presented in the Global Biodiversity Information Facility), restricted-ranged species, which is a strong candidate for the next update of the Red Data Book of Armenia. Its consideration is very important, otherwise the Project works may exterminate half of its population in the country.
the Sisian- Armenia", a settlements and RA I following s Plants as p N "On app	of the Plan, in Figural Road Section Again Road Section Road Section Road Section Road Road Book species, pecies listed in the RAI Book Road Road Road Road Road Road Road Road	on, Syunik Marz, of rural and urban ran road section additionally the A Red Book of RA of Decision N 72-c of Plants of the	The distribution map in the Red Book of Armenia provides quite approximate data, while the field survey within the ESIA is more detailed and the desk research involved careful work with the herbarium where distribution spots for every specimen with the herbarium where distribution spots for every specimen were checked. The below clarifications have been added to the ESIA documents where relevant.
- Astragalus category,	<i>humilis /</i> Sisian city s	urroundings / CR	In the Sisian Region, this species grows only in the vicinity of the City of Sisian and near Zorakarer. The closest distance from the Sisian-Kajaran section of the highway is 4-6 km.
- Sclerochlo Sisian / EN	a woronowii /Woron	ov's hard grass/	In the Sisian Region, it grows near the village of Bnunis. The distribution spots mentioned in the Armenian Red Book (2010) are far from the Sisian-Kajaran road (about 9.3 km away), and the closest station to the footprint was recorded in 1995 by the Project botanist at about 1km from the road alignment, so it is very unlikely that this species might be present under the footprint. However, as a precautionary approach, this species has been now flagged in the Pre-construction biodiversity surveys (RD12) of the BAP, for the botanists to be particularly vigilant about this species, to ensure that it is not present within the footprint, and that it is as well integrated in BAP5 in order to be translocated outside of the project footprint in a favorable habitat, in the unlikely event it would be found.
	s <i>meschetica /</i> Korr age surroundings /CR		In the Sisian Region, it grows near the villages of Shamb and Darbas. The closest distance of its locations in the vicinity of Shamb to the Sisian-Kajaran road is 2-3 km.







Comments and questions received	Project Response actions and references in the ESIA documents
	The location in the vicinity of the village of Darbas to the Sisian-Kajaran road is about 600-800 m to the North-West.
- Potentilla cryptophila / above Darbas village / EN category,	In the Sisian region, it grows in the northwest of the village of Darbas, at about 1-1.5 km from the Sisian-Kajaran highway.
- Psephellus zangezuri / Geghi village / EN category,	It has not been found by us in nature, despite intensive scientific expeditions. The old herbarium data (which do not have GPS coordinates) do not allow determining exact locations, so it is hard to say that the species definitively occur within the 500m buffer zone of the Sisian-Kajaran Road.
- Tulipa confusa / tangled tulip / Kajaran / EN category,	In the Kapan Region, it grows near the village of Pkhrut, which is outside the study area of the Sisian-Kajaran road.
- Polystichum lonchitis / Banpot lance-shaped / EN category,	In the Kapan Region, it grows on the slopes of Mount Khustup, as well as on Mount Sakkar, not far from the Meghri Pass. <i>Polystichum lonchitis</i> is not found near the planned Sisian-Kajaran Road. The closest distance from the Sisian-Kajaran section is min 2 km.
- Astragalus prilipkoanus/ between Kapan and Kajaran / EN category.	In the Kapan Region, it grows near the villages of Pkhrut, Gyard, and Katnarat. The closest location from the Sisian-Kajaran Road is approximately from 700 m to 3 km.
10. The presence of the <i>Tulipa florenskyi</i> species mentioned in the Plan in the Sisian-Kajaran road section or its surroundings needs clarification, because according to the RA Red Book of plants, the latter is found only in the Meghri floristic region (Agarak, Meghri, Kartchevan, Shvanidzor, Newvadi).	Tulipa florenskyi was found by us above the village of Dzagedzor, together with Tulipa sosnovskyi. A small part of the population is located within a 500-m buffer zone of the proposed road. However, it is possible that the "Tulipa florenskyi" specimens (identified based on morphology) are just a variation of Tulipa sosnovskyi, and additional genetic identification might be necessary. In both cases, it is necessary to collect all the bulbs of these species in the working area, grow them in nurseries, and after the completion of the road work, return them to nature. The necessary actions for Tulipa florenskyi include the measures of translocation of the species and are described in the BAP 5: Experimental translocation of endemic restricted-range plant species.
11. The "Legal and Regulatory Framework Related to Biodiversity" section needs to be updated by including the RA Government Decision №781-N dated 14.08.2014 "On the protection of the objects of the RA flora and their use for the purpose of reproduction in natural conditions".	Added.
Originator of comments: i) leading specialists of the Sisian Municipality's Department for Development Programs, Tourism, Service, Trade and Advertising and ii) Chief specialist of the Syunik Regional Coordination Division of the History and Cultural Monuments Preservation Department (the Ministry of Education, Science, Culture and Sports), joint letter dated 03.11.2023.	
1. Along the road, wherever it is possible to lay irrigation derivation pipelines, where the position of the site will allow to carry out partial planting, care, irrigation of alleys along the highway; to organize construction and further maintenance works of land, land construction and irrigation water lines system. During the stages of organizing, designing and implementing road	All the proposals are important and will be taken by the RD on board for consideration and further discussion with the Construction Contractor. Location-specific proposals will be considered by the RD and Construction Contractor in consultation with the Sisian and Kajaran Community stakeholders.







Cor	nments and questions received	Project Response actions and references in the ESIA documents
	construction works, please take into account the compatibility and combination of these works at the same time and in cooperation with community structures.	
2.	The entire quantity of the spoil can be used for the purposes of conservation, recultivation, greening of contaminated areas, organic landfills, thus reducing the volumes of spoil to be disposed in one SDA.	Dedicated consultations on the SDAs will continue, as documented in the Project's SEP. Location-specific proposals will be considered by the RD and Construction Contractor in consultation with the Sisian and Kajaran Community stakeholders, as well as other parties that expressed interest in use of spoil (such as the Ministry of Environment and the Ministry of Defence, as indicated in ESIA Volume 1 and the SEP).
3.	Within the framework of the company's corporate social responsibility, organize support for the improvement of roadside arable land, cropland, unused own, waste land, land leveling works.	The RD will consider this proposal within its possibilities and capacities given that the RD is the state-owned company (not a private incorporation).
4.	In the course of earth excavation and road construction works, please take into account the preservation of historical and cultural values and areas in the roadside areas, the undisturbed	The Project fully considers cultural heritage aspects. The analysis of alternatives from the cultural heritage perspective was completed during the Project feasibility study in 2016 and reconfirmed in the ESIA process.
	preservation of monuments and the preservation of the specified distance, based on the archaeologist's instructions.	ESIA Volume 4, Section 2.3 presents detailed information on the cultural heritage baseline and completed archaeological surveys. Table 9 therein indicated the 'Potential to be impacted' for each of the 54 sites (76 units). Assessment of impacts on cultural heritage is documented in Sections 3.8 and 3.9 of ESIA Volume 4. Mitigation is presented in the ESMP (ESIA Volume 6) and further detailed in the draft Cultural Heritage Management Plan.
		Both, the Construction Contractor and the Supervision Engineer will have archaeologists among their staff to properly implement and supervise the <b>Cultural Heritage Management Plan.</b>







#### Annex 1. THE RD'S ANNOUNCEMENT ABOUT THE ESIA DISCLOSURE PERIOD

#### A) Website of the RD

PARTNERS (/EN/PARTNERS) DONORS (/EN/DONORS) CAREERS (/EN/CAREERS) CONTACTS (/EN/CONTACTS)

AMINITES //ARM/DOAD.AM/AN/NEWS/INNER/NEWS\_21.07.2023) EN (https://armroad.am/en)

EN (https://armroad.am/en)

PARTNERS (/EN/PARTNERS) DONORS (/EN/DONORS) CAREERS (/EN/CAREERS) CONTACTS (/EN/CONTACTS)

AMINITES //ARMROAD.AM/AN/NEWS/INNER/NEWS\_21.07.2023) RU (https://armroad.am/en)

ABOUT US V PROJECTS V DOCUMENTS V PROCUREMENT V PUBLIC RELATIONS V SAFEGUARD POLICY V

Home / (https://armroad.am/en) News (https://armroad.am/en/news) / RD's announcement

#### RD'S ANNOUNCEMENT



#### Latest news

Ավարտական փուլում է Մ-17 /Մ-2/ (Կապան)-Ծավ-/Մ-2/ ճանապարհի կմ73+600-կմ90+800 հատվածի միջին նորոգումը

(https://armroad.am/en/news/inner/News\_30.11.2023) 30-11-2023

See in Armenian.

> Read more (https://armroad.am/en/news/inner/News\_30.11.2023)

#### Յանդիպում՝ Տրանշ-2-ի տեխհսկողությունն իրականացնող կազմակերպության ներկայացուցիչների հետ

(https://armroad.am/en/news/inner/News\_30.11.2023\_5) 30-11-2023

See in Armenian.

> Read more (https://armroad.am/en/news/inner/News\_30.11.2023\_5)

#### Գծակշում՝ Մ-2-ի բետոնապատ հատվածում

(https://armroad.am/en/news/inner/News\_29.11.2023\_1) 29-11-2023

See in Armenian.

> Read more (https://armroad.am/en/news/inner/News\_29.11.2023\_1)

> VIew all news (https://armroad.am/en/news)

21-07-2023



https://armroad.am/en/news/inner/News\_21.07.2023





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The North South Road Corridor (NSRC) is Armenia's main transportation artery, key for the country's connectivity on the national and regional levels. The NSRC consists of several road sections, and the 60-km Sisian-Kajaran Road section (the Project) in Armenia's southern region of Syunik is one of them. The "Road Department" Fund, under the Ministry of Territorial Administration and Infrastructure of Armenia, will implement the Project.

The Project has undergone an Environmental and Social Impact Assessment (ESIA) according to the EBRD, EIB and ADB requirements and national regulations. The ESIA has been conducted in two stages: Scoping and Assessment. Scoping disclosure and seven consultation meetings were held in April-May 2022. Following this, the Project's ESIA report and the relevant management plans have been prepared.

In line with the international banks' requirements, the RD announces the public disclosure of the draft ESIA package for min. 120 days, in this particular case: from 21 July 2023 to 1 December 2023. The draft ESIA package includes the below documents that can be accessed in Armenian and English at the RD's website:

Reports	Armenian versions	English versions
ESIA Report	<u> Յատոր 1. Ծրագրի սահմանումը (https://armroad.am/uploads/env/Sisian-Kajaran/S-</u>	Volume 1. Project Definition (https://armroad.am/uploads/env/Sisian-Kajaran/S-
that documents	K_Road_ESIA_Volume_1.%20Project%20Definition%20Legal%20Methodsetc5June23_ARM.pdf)	K_Road_ESIA_Volume_1.%20Project%20Definition%20Legal%20Methodsetc5June23_ENG.pdf)
the	<u> Յատոր 2. Կենսաբազմազանություն (https://armroad.am/uploads/env/Sisian-Kajaran/S-</u>	Volume 2. Biodiversity (https://armroad.am/uploads/env/Sisian-Kajaran/S-
environmental	K_Road_ESIA_Volume_2_Biodiversity_17July23_Final_ARM.pdf)	K_Road_ESIA_Volume_2_Biodiversity_17July23_Final_ENG.pdf)
and social	<u> Յավելված 1 Գլուխ 2-ի. Կենսաբազմազանություն, ելակետային վիճակի վերլուծություն, ռիսկերը,</u>	Annex 1 - Biodiversity Baseline Report to ESIA Volume 2. Biodiversity
baseline,	<u>ազդեցությունների գնահատում</u>	(https://armroad.am/uploads/env/Annex%201_to_ESIA%20Vol%202,%20Biodiversity%20Baseline%20ENG.pdf)
impact / risk	(https://armroad.am/uploads/env/Annex%201_to_ESIA%20Vol%202.%20Biodiversity%20Baseline%20ARM.%5b1%5d.pdf).	· Annex 2 – Critical Habitat Assessment To ESIA Volume 2, Biodiversit
assessment,	· <u> </u>	(https://armroad.am/uploads/env/env/Annex%202_to_ESIA%20Vol%202.%20Critical%20Habitat%20Assessment%20ENG.pdf)
and mitigation,	(https://armroad.am/uploads/env/Annex%202_to_ESIA%20Vol%202.%20Critical%20Habitat%20Assessment%20ARM.pdf)	· Annex 3 – Appropriate Assessment To ESIA Volume 2. Biodiversit
management	· <u>Յավելված 3. Յամապատասխան գնահատում</u>	(https://armroad.am/uploads/env/env/Annex%203.to_ESIA%20Vol%202.%20Appropriate%20Assessment_ENG.pdf)
and monitoring	(https://armroad.am/uploads/env/Annex%203_to_ESIA%20Vol%202.%20Appropriate%20Assessment_ARM.pdf)	· Volume 3. Physical Environment (https://armroad.am/uploads/env/env/S-
actions;	· <u> </u>	K_Road_ESIA_Volume_3_Physical_Environment_10Jul23_ENG.pdf)
	K_Road_ESIA_Volume_3_Physical_Environment_10Jul23_ARM.pdf)	· Volume 4. Social Environment (https://armroad.am/uploads/env/Sisian-Kajaran/S-
	· <u> </u>	K_Road_ESIA_Volume_4_Social%20Environment_10Jul23_ENG.pdf)
	K_Road_ESIA_Volume_4_Social%20Environment_10Jul23_ARM.pdf).	· Volume 5. Cumulative Impact Assessment (https://armroad.am/uploads/env/env/S-
	· <u> - Յատոր 5. Գումարային ազդեցության գնահատում (https://armroad.am/uploads/env/env/S</u>	K.Road ESIA Volume 5. Cumulative 29Jun23 ENG.pdf).
	K_Road_ESIA_Volume_5_Cumulative_11Jun23_ARM.pdf)	Volume 6. Environmental and Social Management Plan (ESMP) (https://armroad.am/uploads/env/env/S-
	· <u> </u>	K_Road_ESIA_Volume_6_ESMP_12July23_ENG.pdf)
	(https://armroad.am/uploads/env/env/S-K_Road_ESIA_Volume_6_ESMP_12July23_ARM.pdf)	Volume 7. Conclusions and Recommendations (https://armroad.am/uploads/env/Sisian-Kajaran/S-
	· <u> </u>	K_Road_ESIA_Volume%207.%20Conclusions%20and%20Recoms_20July23_ENG.pdf)
	K_Road_ESIA_Volume%207.%20Conclusions%20and%20Recoms_20July23_ARM.pdf)	
Non-technical	https://armroad.am/uploads/env/Sisian-Kajaran/Armenia_S-K_Road_NTS_14Jun2023_ARM.pdf	https://armroad.am/uploads/env/Sisian-Kajaran/Armenia_S-K_Road_NTS_14Jun2023_ENG.pdf
Summary	(https://armroad.am/uploads/env/Sisian-Kaiaran/Armenia_S-K_Road_NTS_14Jun2023_ARM.pdf)	(https://armroad.am/uploads/env/Sisian-Kajaran/Armenia_S-K_Road_NTS_14Jun2023_ENG.pdf)
which is a	\(\text{N=p}\)	
concise and		
over-arching		
document		
summarising		
the results of		
the ESIA in non-		
technical		
language;		
ianguage,		

https://armroad.am/en/news/inner/News\_21.07.2023







Stakeholder	https://armroad.am/uploads/env/Sisian-Kajaran/S-K%20Road_SEP_16.05.2023_ARM.pdf	https://armroad.am/uploads/env/Sisian-Kajaran/S-K_Road_SEP_16.05.2023_ENG.pdf
Engagement	(https://armroad.am/uploads/env/Sisian-Kajaran/S-K%20Road_SEP_16.05.2023_ARM.pdf)	(https://armroad.am/uploads/env/Sisian-Kajaran/S-K_Road_SEP_16.05.2023_ENG.pdf)
Plan that		
guides		
information		
disclosure and		
meaningful		
engagement		
with Project		
stakeholders,		
and a grievance		
mechanism;		
D	https://armroad.am/uploads/Social/Social/Armenia_SK_Road_Resettlement_Framework_27Jun23_ARM,[1],pdf	https://www.ada.gov/ulande/spu/Cining Vaisang/Armania CV David Davidharant Francisco A7 Lug 22 FMC adf
Resettlement Framework	https://armroad.am/uploads/Social/Social/Armenia_Sk_Road_Resettlement_Framework_2/Jun23_ARM;[jj,pdi]	https://armroad.am/uploads/env/Sisian-Kajaran/Armenia_SK_Road_Resettlement_Framework_27Jun23_ENG.pdf (https://armroad.am/uploads/env/Sisian-Kajaran/Armenia_SK_Road_Resettlement_Framework_27Jun23_ENG.pdf)
that guides	(III, IS, A annioad, any diploads/ Socialy Socialy Annie III annie	Antiques,// antiquedus.ant/uploads/env/sisiair-rajarant/antienia_sr_road_resettienienic_rantework_2/301/25_env.purj
Project-related		
land		
acquisition,		
compensations,		
livelihood		
restoration, and		
other related		
issues;		
Biodiversity	https://armroad.am/uploads/env/Sisian-Kajaran/S-K_BAP_20Jul23_ARM.pdf (https://armroad.am/uploads/env/Sisian-	https://armroad.am/uploads/env/Sisian-Kajaran/S-K_BAP_20Jul23_ENG.pdf (https://armroad.am/uploads/env/Sisian-
Action Plan	Kajaran/S-K_BAP_20Jul23_ARM.pdf)	Kajaran/S-K_BAP_20Jul23_ENG.pdf)
that articulates		
actions that		
can help ensure		
the		
conservation or		
enhancement		
of potentially		
affected		
habitats and		
species;		
Environmental	https://armroad.am/uploads/env/env/Armenia_S-K_Road_ESAP_27.06.2023_ARM.pdf	https://armroad.am/uploads/env/env/Armenia_S-K_Road_ESAP_27.06.2023_ENG.pdf
and Social	(https://armroad.am/uploads/env/env/Armenia_S-K_Road_ESAP_27.06.2023_ARM.pdf)	(https://armroad.am/uploads/env/env/Armenia_S-K_Road_ESAP_27.06.2023_ENG.pdf)
Action Plan	<u></u>	
that contains		
actions		
required to		
implement the		
Project in		
compliance		
with the		
international		
lenders'		
requirements.		
1		







Stakeholders are welcome to review the posted reports and provide feedback or make inquiries during the disclosure period to:

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During the disclosure period, public consultation meetings will be conducted in Yerevan, Sisian, Kajaran and several administrative units in the Project area (in Sisian and Kajaran Communities). Information about the planned consultation meetings will be announced in advance.

https://armroad.am/en/news/inner/News\_21.07.2023

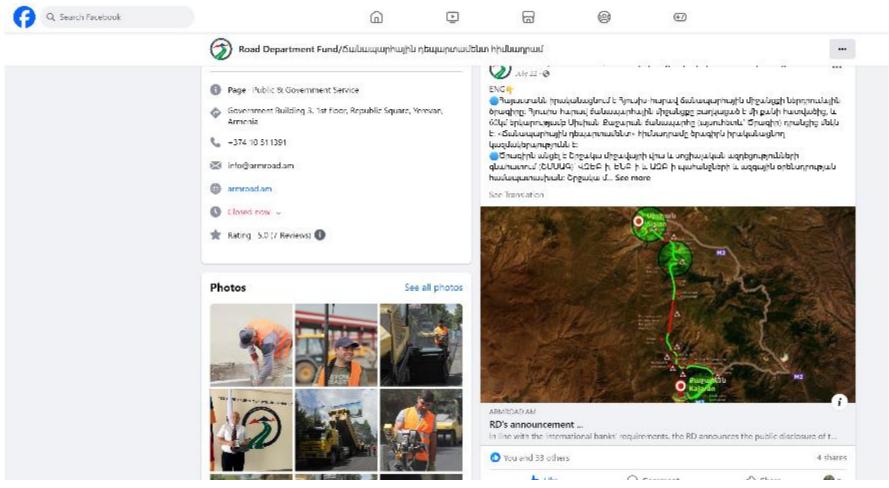








## B) Facebook page of the RD









#### Annex 2. ESIA LEAFLET

#### Armenian version

ՇՐՁԱԿԱ ՄԻՁԱՎԱՅՐԻ ՎՐԱ ԵՎ ՍՈՑԻԱԼԱԿԱՆ ԱՂԴԵՑՈՒԹՅԱՆ ԳՆԱԴԱՏՈՒՄ (ՇՄՍԱԳ) 3U3UUSUU. ՍԻՍԻԱՆ-ՔԱԶԱՐԱՆ ՃԱՆԱՊԱՐՅԱՅԱՏՎԱԾԻ ԾՐԱԳԻՐ

#### ԱՄՓՈՓԱԳԻՐ

#### **ԵՐԱԳՐԻ ՆԱԽԱՊԱՏՄՈՒԹՅՈՒՆԸ**

Յալաստանը նախաձեռնել է Յլուսիս Յարավալին ճանապարհային Միջանցքը (ՅՅՃՄ)՝ ընդյայնված Տրանսեվրոպական տրանսպորտային ցանցի հիման վրա։ Նախատեսված 60կ**մ Սիսիան-Քաջարան** ճանապարհը (Ծրագիր) հանդիսանում է ՅՅՃՄ-ի մասը:

Վերակառուցման և Չարգացման Եվրոպական Բանկր (ՎշեԲ), Եվրոպական Ներդրումային Բանկը (ԵՆԲ) և Ասիական շարգացման Բանկը (ԱԶԲ) (Վարկատուներ) դիտարկում են Ծրագրի համաֆինանսավորումը։ Դիտարկվում է նաև ներդրումային դրամաշնորհ ԵՄ Յարևանության ներդրումային հարթակից։ Ծրագիրը կիրականացնի 33 տարածքային կառավարման և ենթակառուցվածքների նախարարության «Ճանապարհային դեպարտամենտ» հիմնադրամի կողմից։

Ծրագրի Շրջակա Միջավայրի և Սոցիալական Ազդեցության Գնահատումը (ՇՄՍԱԳ) կատարված է ՎՁԵԲի, ԵՆԲ-ի և ԱԶԲ-ի պահանջներին և ազգային օրենսդրության համապատասխան՝ «Էկոլայն Ինթերնեքնլ» บัทย์ (คกเทพทคพ). «Uh h Uninเวนน» บัทย์ (สินสิ) นะ ๊ะเลื ԹԻ ԷՄ ԷՄ Սույուշմա» ՍՊԸ (Յայաստան) կոնսորցիումի կողմից՝ "Բիոտոպ ՍՊԸ (Ֆրանսիա), Բիոգեոտեխ ՍՊԸ (Յայաստան) և այլ գործընկերների աջակցությամբ։



Նոր ճանապարհը անցնելու է Աղիտու, Դարբաս, Գետաթաղ, Լոր, Շենաթաղ, Քիրս, Քարութ, Գեղի, Վերին Գեղավանք և Կավճուտ (ուղևորվում է դեպի hարավ) բնակավայրերի մոտակայքով և կունենա 27 կամուրջ, 3 խոշոր խաչմերուկ, 14 սպասարկման ճանապարհ, 9 թունել, 4 գյուղ.տեխնիկայի և 5 խոշոր եղջերավոր անասունների անցումներ։



Թունելներից ամենամեծը՝ Բարգուշատի թունելը (8.64 կմ երկարությամբ), առաջին անգամ ուղիղ կապ է հաստատելու Սիսիակի և Քաջարակի միջև։ Թունելը կանխելու է նաև Ծրագրի անմիջական ազդեցությունը շանգեզուրի արգելավայրի վրա (հատուկ պահպանվող տարածք)։ Ճանապարհը ունենալու է երկու երթևեկելի գոտի (յուրաքանչյուր ուղղությամբ մեկական)՝ զառիթափ վերելքներով լրացուցիչ երթուղիներով։

#### ԾՐԱԳՐԻ ՊԼԱՆԱՎՈՐՈՒՄԸ, ԺԱՄԱՆԱԿԱՑՈՒՅՑԸ ԵՎ ՇՄՍԱԳ-Ը

ՇՄՍԱԳ-ն իրականացվել է երկու՝ նախնական և հիմնական գնահատման փուլերով։ Նախնական փուլը ավարտվել է 2021-2022 թվականներին, երբ անցկացվել են խորհրդակցություններ՝ Ծրագրի վաղ պլանավորման փուլում շահագրգին կողմերից կարծիքներ ստանալու համար։

Յիմնական փուլում իրականացվել են ելակետային ուսումնասիրությունները և գնահատվել են հնարավոր ազդեցությունները՝ որպես առկա կենսաֆիզիկական և սոցիալական միջավայրերի վիճակի ու զգայունության և առաջարկվող Ծրագրի ռիսկերի ֆունկցիա։ Յնարավոր ազդեցությունները կառավարելու համար առաջարկվել են հատուկ մեղմացման միջոցառումներ։ Գնահատման արդյունքը փաստաթղթավորվել է ՇՄՍԱԳ հաշվետվության, ինչպես նաև ազդեցությունների առաջարկվող սեղմացումների տեսքով (Բնապահպանական և սոցիալական կառավարման պլան)։

ՇՄՍԱԳ-ի փաթեթը ներառում է մի քանի փաստաթղթեր՝ ՇՄՍԱԳ հաշվետվություն, Բնապահպանական և սոցիայական միջոցառումների այան, Կենսաբազմագանության միջոցառումների այան, Շահառուների ներգրավման պլան, Տարաբնակեցման շրջանակ և Ոչ տեխնիկական ամփոփում (տես Ճանապարհային กฉับบนทางแบบในเทค ในบุเวก https://armroad.am/am/news/inner/News 21.07.2023

Սպասվում Է, որ շինարարական աշխատանքները կմեկնարկեն 2024 թվականին և կտևեն 6 տարի։ Ճանապարհի շահագործման ժամկետը՝ 25+։

Ձեր մեկնաբանությունները ՇՄՍԱԳ-ի վերաբերյալ ողջունելի են



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#### ՇՄՍԱԳ-Ի ՅԻՄՆԱԿԱՆ ԱՐԴՅՈՐՆՔՆԵՐԸ

Ազդեցությունները կարող են առաջանալ շինարարական աշխատանքների հետևանքով, այդ թվում հոդի իեքացվակ և տեղաշարժի, պեղուվների, Թունելների համար պայթեցումների, թափոնների աբաջացվան, բեռնատարների և շիևտեխնիկայի երթևեկության, գետի ջրի օգտագործման, հողային հանույթի տեղադրման և այլն, ինչպե՞ս նաև շահագործման փուլում երթևեկությունից և սպասարկման աշխատանքներից։

Բնապահպանական և սոցիալական ազդեցությունների նույնականացումը, գնահատումը և կառավարումը

Օդի որակ	Դիմնականում՝ փոշու արտանետումներ, շահագործման փուլում՝ գազեր մեքենաներից	Գնահատում + մոդելավորում -> բացասական չափավոր ազդեցություններ	Օդի որակի կառավարման պլանի մեղմացումները կնվազեցնեն ազոեցությունները մինչև <u>գածոի։</u> Շինարարության փուլում 16 բնակավայրերում մշտադիտարկում։
		պայքարի միջոցներ, ներառ, ւրհի եզրին գտնվող բուսակ	յալ ջրցանը, արագության և երթևեկության անությունը
Աղմուկ և թրթռում	Ազդեցություններ բեռնատարներից, երթևեկությունից, պայթեցումներից, շահագործման փուլում՝ երթևեկությունից:	Գնահատում +  մոդելավորում -> բացա- սական ազդեցություններ որոշ վայրերում և զգալի ազդեցություններ 2048թ ի կանխատեսումների համար: Բացասական	Աղմուկի, թրթոման և պայթեցումների կառավարման պլանները՝ ժեղմացումներով կնվազեցնեն ազդեցությունները մինչև չափավոր (առվտել) և ցանր (թրթոռւմ)։ Մշտադիտարկում աղմուկի համար 40 և թոթոման համառ 80 վայրերում

เทกเเทเรี + เมเมเละโดเป็นไม เทกกอันเกโทเรโปโลก 12 เทกกก เทกเทกกิเกเลเกเไมโลก

ұппцпи + щі	ија вдиши уппрашруп	Luuuji	ac quippi a	and and and	уптаварт.
Մակերև- ութային ջրեր	Աղտոտվածություն հողի Էրոզիայից, փոշու և գազային արտանետումնե-	->	ուստում սսական սվոր	թունելի չ կառավա	ոերի և անձրևաջրերի կառավարման պլան, չրերի կառավարման պլան, արտահոսքերի րման պլան և այլն մինչ <u>անտեսվող</u> թյունները նվազեցնելու համար
	րից, թունելի կեղտաջրերի արտահոսքից			իետո, պ գտնվող	չ արտահոսքի կետերը և 50 մ դրանցից լանավորված ճանապարհից 300 մ-ի վրա ջրահոսքերի + աղբյուրների տարկում՝ բնակավայրերում
Ստորգետ- Նյա ջրեր				ազդեցու Աղբյուր ճանապ	կառավարման պլաններ մինչ <u>ցածր</u> թյունը նվազեցնելու համար։ սերի մշտադիտարկում պլանավորված արհեր 300 մ հեռավորության վրա` այրերում
կեղտաջրերի ժամանակաշլ	արտահոսքերի մաքրու	น, พวุน ผมทาบ	ատանքն ներ կառո	երի համաս ւցելիս նաի	յին ջրերի արտահոսքերի կառավարման համար, լատասխանեցում ցածր հոսքի սազգուշական միջոցներ, շահագործման փուլում սիում
<b>Գեո-</b> <b>վտանգներ</b> (շահագործ- ման փուլ)	Risks to the road from landslide, mud- flows, or snow avalanches	->	սատում	շարունա ճանապա ռիսկերի կայունաց օրինակ.	մական ուսումնասիրությունները վվում են և 3D մոդելավորումը կօգտագործվի դիդի երկայնքով երկրաբանական վտանգի վերլուծույթյան համար։ Կվշակվի շեպերի լման պլամ՝ մեղմացնող միջոցառումներով, ջրահեռացման համակարգերի կառուքում թյունը մինչէ <u>գանը</u> նվազեցնելու համար։

Մեղմացման օրինակներ. քանակի կրճատում, թափոնների դասակարգում, վտանգավոր և ոչ վտանգավոր թափոնների տարանջատում և հետագայում չվերամշակվողի և վերամշակելիի, անվտանգ տեղադրման տարբերակներ և տարածքներ։

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Uthumulumbah Impountali

յակ, կազմակերպել վայրի բև յային արգելքները, շահագոր րի բախման ռիսկերը ցանկա 54 վայրերում իպլտնաբերված են 76	อัปเนโน ปุกญก บนุนเนาป์เนโน เ	ւմ նվազե			
		ungngny	дии үшууг	рипц <del>о</del> јши	
վիավորևեր, որոնցից 10-ը գրանցված են պետական ցանկում։ Յավանաբար 46 վայրեր (67 միավորներ) կարող են ազդվել։	և ազդեցուր	սև որձր ոյունից թյան	կառավար բնորոշ մե միջոցառո համաձայն համապաս մարմիննե	սյին ժառանգության սման պլանի վայրին դմացնող «Ամերը պետք Է «Եցվեն Վարկատուների և տասխան պետական «Որի հետ՝ Նվազեցնելու «յունները մինչև փոքը։	
որից տարբեր հեռավորություն	նների վրա գ	guntiying dj	กกบุล)เป็น ปูก	ուս, ինչպես նաև	
ազդեցություն (արհեստն					
և ծառայությունների ձեռք բերումներ, Իարկերի վճարում, ծախսերի խնայողություն՝ պայսնանավորված ճանապարհորդության ժամանակի և ծախսերի կրճատմանը գրտաշրջության հանագրահի ներուժի ուժեղացում		դրական չափավորից մեծ (տեղային), չափավոր (տա- րածաշրջան) և ցածր (ազգային)		✓ Մատակարարում- ների պլան ✓ Յավաքագրման պլան և քաղաքականու- թյուն Դրական ազդեցությունների	
900-1000 անուղղակի աշխատ րինակեր, առաջնահերթություն	ստեղեր <i>տալ Սիսիա</i> ն		ան համայնք	աստիճանի բարձրացում Չներից ապրանքների և	
Լրացուցիչ ճնշում առողջապահ հաստատությունների, տեղակա պարիների, թափոնների տեղա	ուսկան Գնահատում -> ոն ճանա- դրման ցածրից չափավոլ		ական	Յանրային ծառայություն- ների պաշտպանության և տեղափոխման պլան, Երթևեկության կառա- վարման պլան՝ ռիսկերը ց <u>անդ դարձնելու համար</u>	
ինակներ. շինհրապարակներու արցերով հրահանգավորում	մ ցանկապաւ	เกทะบ์ โะ น์ทะ	տքի հսկողո	ւթյուն, համայնքային	
թյամբ ճանապարհատրանա պատահարների ռիսկեր, > Ներգնա աշխատողների կո	սպորտային ւղմից բերված	> բացա ցածրից	սական	Յանրային առողջության և անվտանգության պլան, երթևեկության կառավարման պլան և այլն՝ դիսկերը <u>գածո</u> դարձնելու համար	
	ուսկանաբար 46 վայրեր (67 միավորներ) կարող են ազդվել։  այներ, ալլանավորված ճանա փարեր հեռանրություն, պատահանական գուսծում  Բացասական ազդեցությ ազդեցություն (արհեստն  Յումքի, ապրանքների, սարբա և ծառայություն (արհեստն  Վումքի, ապրանքների, սարբա և ծառայությունի այնային ծեռջ բեր ինայություն՝ պայնանավոր ինարոդ-թյուն՝ պայնանավոր ինարոդ-թյուն՝ այսանանավոր ինարոդ-թյուն՝ այսանանավոր ինարոդ-թյուն՝ այսանանակություն Երագիրը կարող է ստեղծել 40 900-1000 անուղոյակի աշխատո Երագիրը կարող է ստեղծել 40 900-1000 անուղոյակի աշխատո Իրևակեր, առաջմաներթություն եռոջբերմանը և զբաղվածությա Լոացուցիչ ճնշում առողջապակ այութիաների և և այն  հուսեներ, շրնդում առողջապահ կայինի և Էկեսրոամատակար համակարգերի վրա և այն  հուսեներ, շրնդումարորի համակարգերի այութ ճանապարում  Ծրագրի որանագորութի  Ծրագրի որանագորութի  Ծրագրի որանագորութի  Ծրագրի որանագորութի  Արսանակարաների միաներ  Արսանակարերի իրակներ  Արսանակարերի իրակեր  Արսանակարերի իրակեր  Արսանակարերի կոսների կու	ակեռական ցանկում։ Վավանաբար 48 Վայինի (67 միավորներ) Լայորդ են ազդվել։  ականեր ալանապիդված ծանապարհից 50 դիկց տարբեր իեռավորությունների վրա ականապարհից 50 դիկց տարբեր իեռավորությունների վրա ազդեցություն կարանուների նարան  Բացասական ազդեցություն չի ապա ազդեցություն (արհեստների ընպան հասարդունների ծեռք բերումներ հարկերի վենրում կայնակարի հարկերի վենրում կայնակարի հարկերի վենրում կայնակարի հանապորություն ապանակորված ձանապարհություն ականակորված ձանապարհություն այնակարի հանարություն ապանակորություն ականակություն հանարություն արանահորթություն տավ Միսիան ծանապարհութի, բանակությություն տավ Միսիան ծանապարհերի, առաջնահերթություն տավ Միսիան ծանապարհերի, թանարիակի աշխատություն Լայությել ճնշում առողջապահական հաստատությունիակի աե այն հանակագրի կա և այն հետևկեր, շինհրապարակներում ցանկապաո արենորում իրանակարություն  > Ծրագրի որանադորուի մանակություն արանակարարություն արանակարարություն  » Երգալի ութակաների հանակարություն ութական ակարարի հետկեր, շինհրապարականի կողմից բերվան վարակի իիվանորություններ	ակեռավան ցանկում։  Radublumpun 46 վայրեր (67 միավորներ) վայրեր են ազդվել։  Այս պատահական գտածոների ընթացակարգ։  Բացասական պոսծոների ընթացակարգ։  Բացասական պոսծոների ընթացակարգ։  Բացասական պոսծոների ընթացակարգ։  Բացասական ազդեցություն չի ապասվում, հանագրություն նարեսություն նարեսություն միասակորի վերարդ արանակորին հանպարիորության ժամանակորված հակարի կերուժի ուժեղացում 900-1000 անուողուկի աշխատասուորի Միասիդեր, առաջափերթություն ուս Միսիան և Քաջար հետարեսիի և գատվածությանը Լուացութիչ ճնշում առողջապահական հանագրություն ային հանակարիի և Էիկտրանարի տեղադրանն հանակարինի և Էիկտրանարակերում ցանկապատում և մու արցնորի իրակարդ և ային հետևկներ, շրնիդապարականերություն տա Միսիան և Հարար հանակարգերի վրա և ային հետևկներ, շրնիդապարություն հանակությանը հետակար ուրանապորություն անակությանը հետակար ուրանակորություն անակություն իր և ային հետևկներ, շրնիդապարություն ային հետևկներ, շրնիդապարություն հանակորություն իր և արարանարի և այրենի ուրակար արանակորություն հանակարարանի և արանակարարություն հանակարություն հանակիներ և այրենի և այրենի արանակորություն հանակիներ և Հինարարանի հանակորություններ  Ինակներ, շրնիդապարակներում ցանկապատում և մու արենարի չիկանորություններ հետևկներ, շրնիդապարակներում ցանկապատում և մու	ակեռական ցանկում։	

Olimbumput LEhimpungfungulproudi

Ref No 46 009 / 14 09 2023 Ref No 46 009 / 14 09 2023





վերապատրաստում՝ գենդերային բռնության և ոտնձգության ռիսկերից խուսափելու համար

#### ՅՈՂԵՐԻ OSUPՈՒՄԸ, ՅԱՍԱՆԵԼԻՈՒԹՅՈՒՆԸ ԳՈՐՅՔԻՆ ԵՎ ՌԵՍՈՒՐՍՆԵՐԻՆ

Ծրագիրը պահանջում է մոտ 295 hա հողատարածք։ Դրանցից շուրջ 13%-ը մասնավոր են, 68%-ը՝ համայնքային, 19%-ը՝ պետական։ Ֆիզիկական տեղահանման ենթակա են 2 տուն և 2 բիզնես։ Ընդհանուր առմամբ, ոիմնական ազդեցությունները վերաբերում են մասնավոր անձանց կամ ձեռնարկություններին պատկանող կամ նրանց կողմից օգտագործվող մշտական հողերի օտարմանը (խոտհարքների, մշակաբույսերի, բույսերի, հողատարածքների, կառույցների կորուստ) և կենսապահովման ազդեցություններին (օրինակ՝ եկամտի կորուստ)։ Արոտավայրերի վրա ազդեցությունը խիստ սահմանափակ է։ Գյուղերի և տեղական Նշանակության բնական ռեսուրմների և կարևոր վայրերի (արոտավայրեր, գերեզմանոցներ, վշակութային հուշարձաններ և այլն) վիջև հասանելիությունը կարող է ժամանակավորապես սահմանա-

**Տարաբնակեցման շրջանակը** մշակված է ՎՁԵԲ/ԵՆԲ/ԱՁԲ և ազգային պահանջներին համապատասխան։ Այն պարունակում է հողի օտարման սկզբունքներ, ինչպես նաև փոխիստուցման և կենսամիջոցների վերականգնման իրավունքներ։ **Տարաբնակեցման պլանը** մշակման փուլում է և կիրականացվի Ճանապարհային դեպարտամենտի կողմից։ Տարաբնակեցման պլանի նախագծի վերաբերյալ խորհրդատվությունները նախատեսվում են 2023 թվականի աշնան վերջին։ Տարաբնակեցման պլանը կիրապարակվի և պատշաճ փոխհատուցումը կտրամադրվի մինչ Ծրագրի հետ կապված հողերի ձեռք բերման կամ իողօգտագործման սահմանափակումների ուժի մեջ մտնելը։ **Մուտքի և տեղական հասանելիության պլանը** կվչակվի գույքի և բնական ռեսուրսների հասանելիությունը և մուտքը կառավարելու համար։

#### ՇԱՅԱՌՈՒՆԵՐԻ ՄԱՍՆԱԿՑՈՒԹՅՈՒՆԸ ԵՎ ՏԵՂԵԿԱՏՎՈՒԹՅԱՆ ՅՐԱՊԱՐԱԿՈՒՄԸ

ՎՁԵՔ/ԵՆՔ/ԱՁՔ չափանիշներին համապատասխան հանրային խորհրդակցությունների հատուկ գործընթացը իրականացվում է 2021 թվականի ապրիլի սկզբից։ Շահառուների ներգրավման պլանի նախագիծը մշակվել է շահագրգիռ կողմերի ներգրավվածությունը համակարգելու համար, ներառյալ հանրային լսուսները, Ծրագրին առնչվող տեղեկատվության հրապարակումը, բողոքարկման մեխանիզմի գործարկումը և շահառուների ներգրավվածության մշտադիտարկումը։

ՇՄՍԱԳ փաթեթը (ՇՄՍԱԳ հաշվետվություն, Բնապահպանական և սոցիալական միջոցառումների պլան, Կենսաբազմագանության միջոցառումների պլան, Շահառուների ներգրավման պլան, Տարաբնակեցման շրջանակ և։ Ոչ տեխնիկական ամփոփում) Իրապարակվել է 2023 թվականի հուլիսի 21-ին Ճանապարհային դեպարտամենտի կայքում։

- ✓ հայերեն՝ https://amroad.am/am/news/inner/News 21.07.2023
  ✓ Ակզերեն՝ https://armroad.am/en/news/inner/News 21.07.2023

ՇՄՍԱԳ-ի բոլոր փաստաթղթերի հայերեն թղթային տարբերակները հասանելի են Սիսիան և Քաջարան համայնքների վարչական շենքերում և Երևանի ճանապարհային դեպարտամեն-นาทเปี:



**Ոչտեխնիկական ամփոփագրի և Շահառուների ներգրավման պլանի** հայերեն տարբերակները հասանելի՝ են Իշխանասար, Աղիտու, Նորավան, Վաղատին, Որոտնավան, Դարբաս, Գետաթաղ, Գետաթաղ, Լոր, Շենաթաղ, Գեղի և Լեռնաձոր վարչական միավորների վարչական շենքերում։

ՇՄՍԱԳ-ի **իրապարակման 4-ամսյա ժամկետն** օգտագործվում է ՇՄՍԱԳ-ի արդյունքները ձեզ ներկայացնելու, ձեր իետ խորիրդակցելու, շրջակա վիջավայրի վրա և սոցիալական ազդեցության գնահատման և մեղմացումների վերաբերյալ կարծիքներ հավաքագրելու համար։

Ծրագրի և հրապարակված հաշվետվությունների վերաբերյալ մեկնաբանությունները և հարցումները կարող են ներկայացվել՝

#### Արտուր Սանոլանին

"Ճանապարհային դեպարտամենտ" իրմնադրամ, 33ՃՄ ԵԾ Տրան2-4՝ Սիսիան-Քաջարան ճանապարհահատվածի ծրագրի ղեկավար

Յայաստան, Երևան, 0010, Յանրապետության հրապարակ, Կառավարական տուն 3 artur.sanoyan@armroad.am

Գրասենյակ՝ +374 10 51-13-91 (213), Բջջ.՝ +374 95 111 537

#### Ինեսա Չարգարյանին

"Ճանապարոային րեպարտասենտ" հիմնադրամ, 33ՃՄ ՄԾ Տրանշ-4, Բնապահպանական ագրեցությունների հարցերով մասնագետ

Rայաստան, Երևան, 0010, Rանրապետության հրապարակ, Կառավարական տուն 3 linesa.zargaryan@armroad.am

Գրասենյակ` +374 10 51-13-91(289), Բջջ.` +374 94 134 237

Յրապարակված հաշվետվությունների վերաբերյալ մեկնաբանությունները և հարցումները կարող են ներկայացվել նաև՝

#### Արտակ Տեր-Թորոսյանին

«ԷՅ ԹԻ ԷՄ ԷՍ Սոլյուշնս» ՍՊԸ (ՇՄՍԱԳ խորհրդատուի ազգային համակարգող)

3այաստան, Երևան, 0051, Գրիբոյեդովի փող. 11-1

Էլ.փոստ՝ artak.ter-torosyan@atms.am

₽22.`+37499 10 94 95

Ձեր մեկնաբանությունները ՇՄՍԱԳ փաստաթղթերի վերաբերյալ սպասվում են մինչև 2023 թվականի ռեկտեմբերի 1-ը

մինչդեռ այլ հարցումները կարելի է ներկայացնել ցանկացած ժամանակ







#### Ref.No.46.010

#### English version

# ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) SISIAN-KAJARAN ROAD PROJECT, ARMENIA

#### INFORMATION LEAFLET

#### PROJECT BACKGROUND

Armenia is establishing the North South Road Corridor (NSRC) on the extended core Trans-European Transport Network. The planned **60km Sisian-Kajaran Road** (the Project) is a part of the NSRC.

The European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB) and Asian Development Bank (ADB) (Lenders) are considering co-financing the Project and an investment grant from the EU Neighbourhood Investment Platform is being sought. The "Road Department" Foundation, under the Ministry of Territorial Administration and Infrastructure of Armenia, will implement the Project.

The environmental and social impact assessment (ESIA) for the Project is prepared in line with the requirements of EBRD, EIB and ADB and national laws by the consortium of Ecoline International Ltd. (Bulgaria), SE Solutions Pty. (South Africa) and ATMS Solutions LtC (Amenia), with support of Biotope (France). Biogeotech (Amenia) and other partners.



The new road will pass by the settlements of Aghitu, Darbas, Getatagh, Lor, Shenatagh, Qirs, Karut, Geghi, Verin Geghavank and Kavchut (heading south) and will have 27 bridges, 3 major interchanges, 14 service roads, 9 tunnels, and 4 passages for agricultural vehicles and 5 cattle crossings. The largest of the tunnels will be the Bergushat tunnel

Coris

Darbos Geleistoch

Consultation

Legend

Project road

Checkpoint

Meghri

Meghri

(8.64 km long) creating for the first time a direct connection between Sisian and Kajaran. The tunnel will also prevent the Project from directly affecting the Zangezur Sanctuary (a specially protected area). The road will be two lanes (one in each direction) with additional climbing lanes on steep ascents.

#### PROJECT PLANNING AND TIMELINE AND ESIA

The ESIA was conducted in two stages, namely Scoping and Assessment. Scoping was completed in 2021-2022 and that time consultations were held to obtain feedback from stakeholders at the Project's early planning stage.

Then, the baseline studies were completed and the potential impacts assessed at the Assessment stage, as a function of the state and sensitivity of the existing biophysical and social environments and the risks posed by proposed project activities. Specific mitigation measures were proposed to manage the potential impacts. The output of the assessment was documented in the draft **ESIA report**, alongside the proposed mitigation to manage the potential impacts (Environmental and Social Management Plan).

The **Draft ESIA** package includes several reports: ESIA report, Environmental and Social Action Plan, Biodiversity Action Plan, Stakeholder Engagement Plan, Resettlement Framework, and Non-technical Summary (see the Road Department's website <a href="https://armroad.am/am/news/inner/News">https://armroad.am/am/news/inner/News</a> 21.07.2023).

The construction of the road is expected to start in 2024 and take around 6 years. The road's operational life is 25+ years.

YOUR COMMENTS ON THE DRAFT ESIA DOCUMENTS ARE WELCOME

Ref.No.46.009 / 14.09.2023



#### **KEY RESULTS OF THE DRAFT ESIA**

Impacts can arise due to construction works such as soil stripping, earth moving, excavation, tunnel blasting, waste generation, movement of traffic -trucks, scrapers, heavy goods vehicles, use of water from the river, disposal of spoil, etc.; as well as from operations: traffic on the road and maintenance works.

#### Identification, assessment and management of environmental and social impacts

Air quality							
ra. quality	Mainly dust emissions; at operations - exhaust gases		egative n	· modelling noderate	n N	ir Quality Management Plan with nitigation will reduce impacts to <u>minor.</u> Ionitoring at dwellings at 16 ettlements during construction	
	mitigation: dust con roadside vegetation	trol me	asures in	cluding w	ater	spraying, speed restrictions, traffic	
Noise and vibration	Impacts from vehicles, traffic, blasting; at operations – traffic.	-> n impa locat for 2 nega	Assessment + modelling -> negative major impacts at certain locations and significant for 2048 predictions; negative moderate from vibration.		Management Plans with mitigation to reduce impacts to moderate (noise) an minor (vibration).  Maniforing at some 40 locations for		
						nachinery and equipment, temporary ing tests & use of small changes	
Surface Water	Pollution from soil erosion, dust and exhaust emissions, tunnel wastewater discharges	Asses ment negati mode	-> W ive of rate M di	ater Mana hers to re onitoring scharge patercours	gem duci 50n ooin es +	Stormwater Management Plan, Turnnent Plan, Spill Management Plan and impacts to negligible.  Jupstream & downstream of Project to and of any works within springs within 300m from the there exist in settlements	
Ground water		to minor.  Monitoring of		age	agement Plans as above to reduce impacts of the yield of springs within 300m from road where exist in settlements		
discharges		low-flow	th to mana periods,	e planned ge surface precaution	wa wa	nd where exist in settlements ter runoff, treatments of wastewater easures when constructing bridges over	
discharges	matching works to liding the use of haza. Risks to the road from landslide,	low-flow	the to manage periods, de-icing fluss- s- us ve St	ge surface precaution aids during eological sed to analy abilisation signed, e.	wa wa n me ope tudii yse Plai g., t	nd where exist in settlements ter runoff, treatments of wastewater easures when constructing bridges over	
discharges rivers, avoi Geo- hazards	matching works to liding the use of haza.  Risks to the road from landslide, mud-flows, or	Asses ment- negati major	the to manage periods, de-icing fluss- s- us ve St	e planned ge surface precaution uids during sological s ed to anal abilisation signed, e. stems to r nent -> e (spoil) or	I roa e wa n me ope tudii yse Plan g., t wa red neg Mo	ad where exist in settlements ter runoff, treatments of wastewater ressures when constructing bridges ove various se are ongoing and 3D modelling will be goo-hazard risks along the road. Slope with mitigation measures will be he construction of slope drainage	
discharges rivers, avoi Geo- hazards (operation) Waste	matching works to iding the use of haza. Risks to the road from landslide, mud-flows, or snow avalanches  Domestic waste from the tunnel construction, construction waste Limited during operations  mitigation: reduction	Assessment negati major	the to manage of periods, of periods, de-icing flusses we save state of the total periods of	e planned ge surface gre surface preceution uids during eological is ed to analiabilisation signed, e. stems to r ment -> e (spoil) or ic) characteri	I roa  waa n me ope tudii yse Pla g., t eduo Wa red neg Mo ins	Industrial in actilements of the result in actilements of wastewater assures when constructing bridges over actions are appoing and 3D modelling will be goo-hazerd risks along the road. Stopen with mitigation measures will be he construction of slope drainage be impacts to minor.  Ste Management Plan with mitigation to uce impacts to minor (construction) an ligible (operations).	

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construction, decrease wildlife collision risks during operations by fencing







#### Sisian-Kajaran Road Project: ESIA Disclosure and Consultation Report

Tangible Cultural Heritage	76 CH units identified in 54 sites, of which 10 sites are registered in the State Lists. 46 sites (67 units) are likely to be affected.	Assessment: Neg Minor – Major (depending on Ch sensitivity values magnitude of imp	and	the Cultural Plan to be a and relevan	mitigation measures in Heritage Management Igreed with the Lenders t National Authorities to acts to minor.	
	tigation: pre-construction conc er of construction site) and va					
Intangible Cultural Heritage	No negative impact is expe etc. ).	ected & a potential	for pos	sitive effect (	revival of crafts, Lavash,	
Economy	products, equipment, payment of taxes, cos reduced travel time as	Procurement of raw materials, various products, equipment, and services; payment of taxes, cost savings due to reduced travel time and costs, tourism and recreation potential enhanced		ssment -> ve rate to (locally), rate	✓ Procurement Plan ✓ Recruitment Plan & Recruitment Policy to increase the extent of	
Employment		The Project may create up to 400-500 direct and 900-1,000 indirect jobs		nally) and nally)	positive impacts	
Example of en Kajaran comm	hancement: prioritise the proc unities	urement of goods a	nd serv	ices and emp	loyment from Sisian and	
Public Utilitie Services and Transport Infrastructure	facilities, local roads, re disposal and power su	Additional pressure on healthcare facilities, local roads, regional waste disposal and power supply systems, etc.		isment -> ive minor derate	Utilities Protection and Relocation Plan, Traffic Management Plan, etc. to reduce the risks to minor and negligible	
Example of mi	tigation: fencing and access c	ontrols at the const	ruction s	ites, commu	nity safety briefings.	
Public Health Safety, and Security	local population and transport,  Communicable dise	local population and Project		sment -> ive minor derate	Community and Occupational Health and Safety Plan, Traffic Management Plan, etc. to reduce the risks to minor.	
Example of mi	tigation: fencing and access c	ontrols at the const	ruction s	sites, commu	nity safety briefings.	
Occupationa Health and Safety	I Risks of worker expo- construction sites to- noise, accident invol- Project vehicles, wor- elevation, etc.	dust, > nega ving minor t	> negative minor to an moderate Management M		Community and Occupational Health and Safety Plan, Labour and Working Conditions Management Plan, Worker Accommodation Plan, Emergency Preparedness and Response Plan to reduce the risks to minor.	
	itigation: provision of training rievance mechanism for work		ipment t	o workers, in	spections, construction	
Gender-speci	fic Employment and entrepreneurship opportunities for won of increased in gende based violence and harassment	> positi minor (opport & nega minor (	Assessment - > positive minor (opportunities) & negative minor (risk of violence)		Recruitment Plan, Worker Code of Conduct and other plans above to enhance positive impacts to moderate and negative to negligible	

#### LAND ACQUISITION AND ACCESS TO ASSETS AND RESOURCES

The Project requires around 295 ha of land. Of this, around 13% are privately owned, 68% - community owned, 19% - state owned. 2 houses and 2 businesses will need to be physically relocated. Overall, major impacts relate to permanent land acquisition owned or used by private persons or businesses (loss of grass-land, crops, plants, land plots; structures) and livelihood impacts (e.g., loss of income). Impact on pastures is very limited. Access between the villages and locally used natural resources and important sites (pastures, cemeteries, cultural monuments, etc.) might be temporarily restricted at places.

The Resettlement Framework prepared in line with applicable EBRD/EIB/ADB and national requirements. It contains principles for land acquisition, and compensation and livelihood restoration entitlements. A detailed Resettlement Plan is under preparation and will be implemented by the Road Department. Consultations on the draft Resettlement Plan are planned in late autumn 2023. The

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Resettlement Plan will be disclosed and due compensation paid before any land-take or land use restriction occurs in relation the Project. The Access and Local Connectivity Plan will be developed to manage access to properties and natural resources, and other management plans (traffic).

#### STAKEHOLDER PARTICIPATION AND INFORMATION DISCLOSURE

A dedicated public consultation process compliant with EBRD/EIB/ADB standards is continued to be conducted since early April 2021. A draft Stakeholder Engagement Plan was developed to guide stakeholder engagement, including public hearings, disclosure of Project-related information, operation of a grievance mechanism, and monitoring of stakeholder engagement.

The draft ESIA package (ESIA report, Environmental and Social Action Plan, Biodiversity Action Plan, Stakeholder Engagement Plan, Resettlement Framework, and Non-technical Summary) were disclosed on 21 July 2023 on the Road Department's website:

- ✓ Armenian: <a href="https://armroad.am/am/news/inner/News">https://armroad.am/am/news/inner/News</a> 21.07.2023
- ✓ English: https://armroad.am/en/news/inner/News 21.07.2023

Paper versions of all ESIA documents in Armenian are available at the administration buildings of Sisian and Kajaran Communities and Road Department Office in Yerevan.

Paper versions of the Non-technical summary and Stakeholder Engagement Plan in Armenian are available at the administration buildings of Ishkhanasar, Aghitu, Noravan, Vaghatin, Vorotnavan, Darbas, Getatagh, Getatagh, Lor, Shenatagh, Geghi and Lernadzor Administrative Units.

4-month ESIA disclosure period is used to consult you on the outcomes of the ESIA and collect opinions on environmental and social assessment and mitigation.

#### Comments or enquiries relating to Project activities and disclosed reports can be directed to:

#### Mr Artur Sanovan

NSRCIP Tranch 4 Sisian-Kajaran Section Project Manager, "Road Department" Fund Government House 3, Republic Square, Yerevan 0010, Armenia artur.sanoyan@armroad.am

office: +374 10 51-13-91 (213), mobile: +374 95 111 537

#### Mrs Inesa Zargaryan

NSRCIP Tranch 4, Environmental Impact Specialist, "Road Department" Fund Government House 3, Republic Square, Yerevan 0010, Armenia

inesa.zargaryan@armroad.am

office: +374 10 51-13-91 (289), mobile: +374 94 134 237

#### Comments or enquiries on the disclosed reports can also be sent to:

#### Mr Artak Ter-Torosyan

ATMS Solutions Ltd. (ESIA Consultant National Coordinator)

11 Griboedov Str, Yerevan, Armenia E-mail: artak.ter-torosyan@atms.am

Mobile: +37499 10 94 95

Your feedback on the draft ESIA documents is awaited until 1 December 2023, whereas your other inquiries are welcome any time.

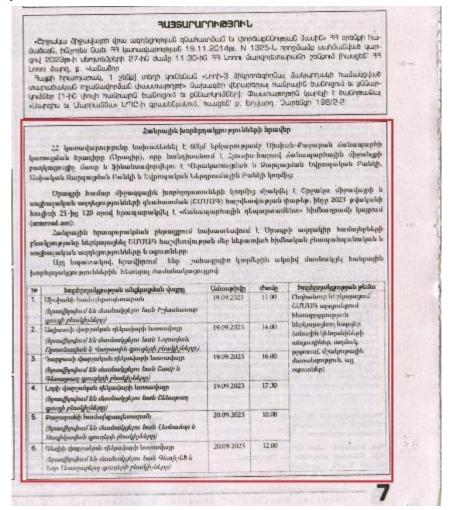
Ref No 46 009 / 14 09 2023





# Annex 3. ANNOUNCEMENTS ABOUT CONSULTATION MEETINGS IN THE PROJECT AREA

# A) Announcement in the Aravot Newspaper about six meetings in the Project Area, issue 159/6931, 14.09.2023









#### B) Announcement on the RD website about six meetings in the Project Area, 13.09.2023

Մեր Մասին ֊ Ծրագրեր ֊ Փաստաթղթեր ֊ Գնոււ

Գլխավոր / (https://armroad.am/am) Նորություններ (https://armroad.am/news) / Յանրային խորհրդակցությունների հրավե

## 



13-09-2023

33 կառավարությունը նախաձեռնել է 60կմ երկարությամբ Սիսիան-Քաջարան ճանապարհի կառուցման ծրագիրը (Ծրագիր), որը 3յուսիս-հարավ ճանապարհային միջանցքի բաղկացուցիչ մասն է և ֆինանսավորվելու է Վերակառուցման և զարգացման եվրոպական բանկի, Ասիական զարգացման բանկի և Եվրոպական ներդրումային բանկի կողմից։

Ծրագրի համար միջազգային խորհրդատուների կողմից մշակվել է Շրջակա միջավայրի և սոցիալական ազդեցությունների գնահատման (ՇՄՍԱԳ) հաշվետվության փաթեթ, ինչը 2023 թվականի հուլիսի 21-ից 120 օրով հրապարակվել է «Ճանապարհային դեպարտամենտ» հիմնադրամի կայքում (armroad.am):

Յանրային իրապարակման ընթացքում նախատեսվում է Ծրագրի ազդակիր համայնքների բնակչությանը ներկայացնել ՇՄՍԱԳ հաշվետվության մեջ ներառված հիմնական բնապահպանական և սոցիալական ազդեցությունները և օգուտները։

Այդ նպատակով, իրավիրում՝ ենք՝ շահագրգիռ կողմերին ակտիվ մասնակցել հանրային խորհրդակցություններին՝ հետևյալ ժամանակացույցով։

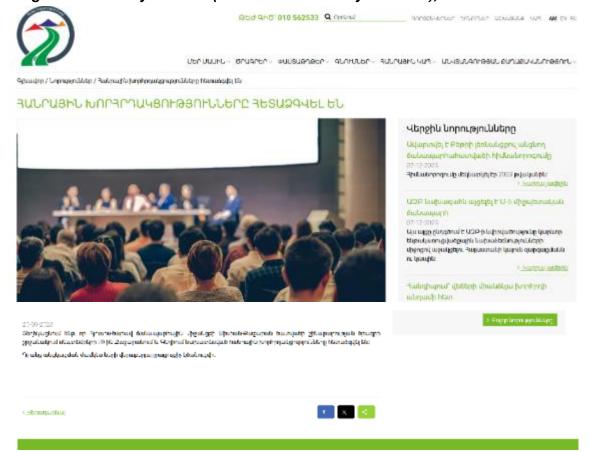
Nº	Խորհրդակցության անցկացման վայրը	Ամսաթիվը	ժամը	Խորհրդակցության թեմա	
1.	Սիսիանի համայնքապետարան (հրավիրվում են մասնակցելու նաև Իշխանասար գյուղի բնակիչները)	19.09.2023	11.00	Ընդհանուր ներկայացում՝ ՇՄՍԱԳ արդյունքում հետաքրքրություն	
2.	Աղիտուի վարչական ղեկավարի նստավայր (հրավիրվում են մասնակցելու նաև Նորավան, Որոտնավան և Վաղատին գյուղերի բնակիչները։)	19.09.2023	14.00	երկայացնող հարցեր (տնային կենդանիների անցուղիներ, աղմուկ, թրթռում, Մշակութային ժառանգություն, այլ օգուտներ)	
3.	Դարբասի վարչական ղեկավարի նստավայր (հրավիրվում են մասնակցելու նաև Շամբ և Գետաթաղ գյուղերի բնակիչները)	19.09.2023	16.00		
4.	Լորի վարչական ղեկավարի նստավայր (հրավիրվում են մասնակցելու նաև Շենաթաղ գյուղի բնակիչները)	19.09.2023	17.30		
5.	Քաջարանի համայնքապետարան (հրավիրվում են մասնակցելու նաև Լեռնաձոր և Ձագիկավան գյուղերի բնակիչները)	20.09.2023	10.00		
6.	Գեղիի վարչական ղեկավարի նստավայր (հրավիրվում են մասնակցելու նաև Գետիշեն և Նոր Աստղաբերդ գյուղերի բնակիչները)	20.09.2023	12.00		







# C) Announcement on the RD website about postponing two meetings in Kajaran and Geghi due to safety reasons (escalation of military situation), 14.09.2023









#### D) Re-announcement about two meetings in Kajaran and Geghi on the RD website



(https://armroad.am/am)

Գլխավոր / (https://armroad.am/am) Նորություններ (https://armroad.am/am/news) / Կանցկացվի Սիսիան-Քաջարան ճանապարհահատվածի ՇՄՍԱԳ հաշվետվությանը նվիրված

Թեժ գիծ՝ 010 562533 🔾 Որոևում

<mark>հանրային ք</mark>ննարկում

## ԿԱՆՑԿԱՑՎԻ ՍԻՍԻԱՆ-ՔԱՋԱՐԱՆ ՃԱՆԱՊԱՐՅԱՅԱԱԾԻ ՇՄՍԱԳ ՅԱՇՎԵՏՎՈԻԹՅԱՆԸ ՆՎԻՐՎԱԾ ՅԱՆՐԱՑԻՆ ՔՆՆԱՐԿՈՒՄ



#### 27-10-2023

33 կառավարությունը նախաձեռնել է 60կՄ երկարությամբ Սիսիան-Քաջարան ճանապարհի կառուցման ծրագիրը (Ծրագիր), որը 3յուսիս-հարավ ճանապարհային միջանցքի բաղկացուցիչ մասն է և ֆինանսավորվելու է Վերակառուցման և զարգացման եվրոպական բանկի, Ասիական զարգացման բանկի և Եվրոպական ներդրումային բանկի կողմից:

Ծրագրի համար միջազգային խորհրդատուների կողմից մշակվել է Շրջակա միջավայրի և սոցիալական ազդեցությունների գնահատման (ՇՄՍԱԳ) հաշվետվության փաթեթ, ինչը 2023 թվականի հուլիսի 21-ից 120 օրով հրապարակվել է «Ճանապարհային դեպարտամենտ» հիմնադրամի կայքում (ammroad.am):

Յանրային հրապարակման ընթացքում նախատեսվում է Ծրագրի ազդակիր համայնքների բնակչությանը ներկայացնել ՇՄՍԱԳ հաշվետվության մեջ ներառված հիմնական բնապահպանական և սոցիալական ազդեցությունները և օգուտները։

Այդ նպատակով, իրավիրում՝ ենք՝ շահագրգիռ կողմերին ակտիվ մասնակցել հանրային խորհրդակցություններին՝ հետևյալ Ժամանակացույցով։

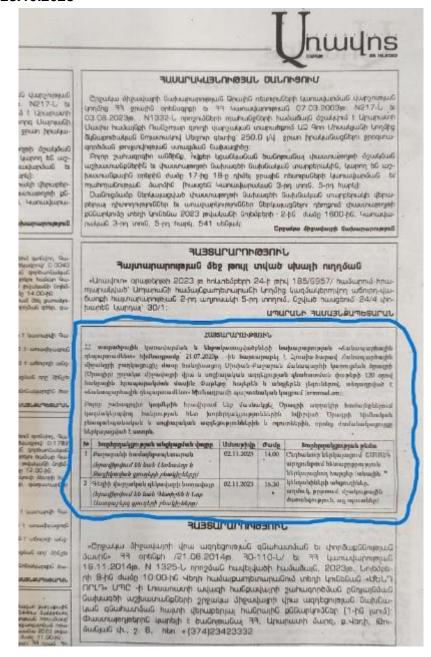
Nº	Խորհրդակցության անցկացման վայրը	Ամսաթիվը	Ժամը	Խորհրդակցության թեմա	
1. 1	Քաջարանի համայնքապետարան (ակնկալվում է, որ կիրավիրվեն նաև Լեռնաձոր և Ձագիկավան գյուղերի բնակիչները)	02.11.2023	14.00	Ընդհանուր ներկայացում՝ ՇՄՍԱԳ արդյունքում հետաքրքրություն ներկայացնող հարցեր (տնային կենդանիների	
2.	Գեղիի վարչական ղեկավարի նստավայր (ակնկալվում է, որ կիրավիրվեն նաև Գետիշեն և Նոր Աստղաբերդ գյուղերի բնակիչները)	02.11.2023	16.30	անցուղիներ, աղմուկ, թրթռում, մշակութային ժառանգություն, այլ օգուտներ)	







# E) Re-announcement about two meetings in Kajaran and Geghi in the Aravot Newspaper N189/6961-28.10.2023









# Annex 4. ANNOUNCEMENTS ABOUT CONSULTATION MEETINGS IN YEREVAN



## ESIA PUBLIC CONSULTATIONS FOR THE SISIAN-KAJARAN (NORTH-SOUTH CORRIDOR) ROAD PROJECT



#### 24-10-2023

The Environmental and Social Impact Assessment (ESIA) report and supportive documents of the Sisian-Kajaran (North-South corridor) road project were disclosed on 21.07.2023 by the "Road Department" foundation, which require public consultations with the Project stakeholders. Within the 120 days ESIA disclosure period it is planned to conduct the following public consultations with the Project stakeholders:

- 25.10.2023 ESIA key findings, impacts and proposed mitigations, place: Ramada Hotel (15 Paystos Buzand str., Yerevan), 14.00 – 16:00, "Grape" hall.
- . 26.10.2023 Project impact on the biodiversity of the region, place: Ramada Hotel, 14.00 16.00, "Grape" hall.
- 27.10.2023 Project impact on cultural heritage, place: Ramada Hotel, 14:00 16:00, "Grape" hall.

Interested parties are invited to participate in the announced events. Those interested can register by e-mail info@atms.am or by phone (099) 10-94-95. ESIA disclosure package can be found via: <a href="https://armroad.am/en/news/inner/News.21.07.2023">https://armroad.am/en/news/inner/News.21.07.2023</a>)









Թեժ գիծ՝ **010 562533** Q ∩րոևում

Գլխավոր / (https://armroad.am/am) Նորություններ (https://armroad.am/am/news) / Կանցկացվի Սիսիան-Քաջարան ճանապարհահատվածի ՇՄՍԱԳ հաշվետվությանը նվիրված

# ԿԱՆՑԿԱՑՎԻ ՍԻՍԻԱՆ-ՔԱՋԱՐԱՆ ՃԱՆԱՊԱՐՅԱՅԱՏՎԱԾԻ ՇՄՍԱԳ ՅԱՇՎԵՏՎՈԻԹՅԱՆԸ ՆՎԻՐՎԱԾ ՅԱՆՐԱՑԻՆ ՔՆՆԱՐԿՈԻՄ



#### 24-10-2023

Սիսիան-Քաջարան (Յյուսիս-հարավ միջանցք) ճանապարհահատվածի ծրագրի շրջակա միջավայրի վրա և սոցիալական ազդեցության գնահատման (ՇՄՍԱԳ) հաշվետվության և հարակից փաստաթղթերը «Ճանապարհային դեպարտամենտ» հիմնադրամի կողմից 21.07.2023թ.-ին ենթարկվել են հանրային հրապարակման (120 օրով), որի շրջանակներում նախատեսվում է անցկացնել ծրագրի շահագրգիռ կողմերի հետ հետևյալ հանրային խորհրդատվությունները՝

- 25.10.2023թ. Ծրագրի ՇՄՍԱԳ հիմնական արդյունքները, ազդեցությունները և առաջարկվող մեղմացումները, վայրը՝ «Ռամադա» հյուրանոց (Երևան, Փավստոս Բուզանդի փող. 15), «Խաղող» սրահ, ժամը 14:00 16:00:
- 26.10.2023թ. Ծրագրի ազդեցությունը տարածաշրջանի կենսաբազմազանության վրա, վայրը՝ «Ռամադա» հյուրանոց, «Խաղող» սրահ, ժամը 14:00 16:00:
- 27.10.2023թ. Ծրագրի ազդեցությունը պատմամշակութային ժառանգության վրա, վայրը՝ «Ռամադա» հյուրանոց, «Խաղող» սրահ, ժամը 14:00 16:00:

Դրավիրում ենք բոլոր շահագրգիռ կողմերին մասնակցելու վերոնշյալ խորհրդակցություններին։ Ցանկացողները կարող են գրանցվել <u>info@atms.am (mailto:info@atms.am)</u> էլեկտրոնային փոստով կամ (099) 10-94-95 հեռախոսահամարով։ ՇՄՍԱԳ փաթեթին կարելի է ծանոթանալ՝ https://armroad.am/am/news/inner/News 21.07.2023

(https://armroad.am/am/news/inner/News\_21.07.2023)

< <u>Վերադարևալ (https://armroad.am/am/news/news)</u>







#### Annex 5. MINUTES OF MEETING NO.1, SISIAN, 19.09.2023<sup>10</sup>

Date	Date Location		Number of participants (of whom women)
19.09.2023 Syunik region, Sisian community		11:00	18 (9)

#### Agenda

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

#### **Participants**

1	Lead specialist of the Urban Development Department, Sisian Municipality	
2	Lead specialist of the Urban Development Department, Sisian Municipality	
3	Lead specialist of the Department of Agriculture and Environmental Protection, Sisian Municipality	
4	Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising, Sisian Municipality	
5	Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising, Sisian Municipality	
6	Second category specialist of the Revenue Accounting and Collection Department, Sisian Municipality	
7	Environmental Impact Specialist, Road Department	
8	Head of Social Impact Management Service, Road Department	
9	Project Engineer, Road Department	
10	Analyst of the European Bank for Reconstruction and Development (EBRD)	
11	Environmental impact assessment specialist, Asian Development Bank (ADB)	
12	Resident	
13	Resident	
14	Resident	
15	Resident	
16	Social specialist, "ATMS Solutions" LLC	
17	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	
18	ESIA specialist, "ATMS Solutions" LLC	

#### **Summary**

During the meeting, National ESIA Coordinator / Environmental impact assessment specialist and Social specialist, "ATMS Solutions" LLC delivered the presentation which covered the Project's background including the primary technical components and the results of the ESIA. They presented the significant environmental and social impacts that could arise during the construction and operation phases of the Project, including its effects on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of land acquisition and compensation, and grievance mechanism. A

<sup>&</sup>lt;sup>10</sup> Names of the participants are kept confidential in these and other Minutes of Meetings that follow.







summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

# Question (Q) - Answer (A) - Proposal (P)

Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising			
Environmental impact assessment specialist, "ATMS Solutions" LLC  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  A National ESIA Coordinator, The outline of the compunity of the planting works.  A National ESIA Coordinator, The outline of the road passes through the used and important of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Solutions" LLC  A National ESIA Coordinator, In the outline of the road passes through the used and important lands of the Sisian enlarged community, and also adjoins several historical and cultural monuments have been identified along the project, most of which will be affected. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation.  Q Lead specialist of the Urban When will the road construction works are planned in the EsiA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by the vibration.  Q Lead specialist of the Urban When will the road construction works are planned in the EsiA. Citing Vorotnavank as a example, he mentioned that it is located at a distance of ab	Q	of Development Programs, Tourism, Trade, Service and	,
of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, RD  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  A Environmental Impact Specialist, RD  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  A Environmental Impact Specialist, RD	A	Environmental impact assessment specialist, "ATMS	of which a number of places have been studied in the Project region, 8 of which have been selected. Later, some of those 8 places were cancelled due to existing restrictions. Instead, the technical consultant of the Project proposed a new land plot in the area of Shenatagh settlement, near the northern entrance of the Bargushat tunnel, which was preliminarily approved by
Environmental impact assessment specialist, "ATMS Solutions" LLC  A Environmental Impact Specialist, RD  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Interview of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  Mitigation measures have been developed for all affected historical and cultural monuments have been identified along the project, most of which will be affected. Mitigation measures have been identified along the project, most of which will be affected. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation. In addition, measures to minimize the impact of vibration on historical and cultural monuments during the construction works are planned in the ESIA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by the vibration.  Q Lead specialist of the Urban When will the road construction work begin?	P	of Development Programs, Tourism, Trade, Service and	construction works to the nearby valleys, then build small-scale
RD  works, which were agreed upon with the community. Therefore, if there are such proposals related to spoil, it may be possible to support community to implement tree planting works.  P Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  During the implementation of the project, it will be necessary to carry out tree planting works by the engagement of specialized contractor organizations.  Q Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC Solutions of the road alignment were considered and all options were studied in detail by archaeologists. The most acceptable of the	A	Environmental impact assessment specialist, "ATMS	the places of possible valleys for the disposal of spoil, then this
of Development Programs, Tourism, Trade, Service and Advertising  A Environmental Impact Specialist, RD  C Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact dassessment specialist, "ATMS dependent of the road alignment were considered and all options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptable options were studied in detail by archaeologists. The most acceptab	A		works, which were agreed upon with the community. Therefore, if there are such proposals related to spoil, it may be possible to support community to implement tree planting
Carry out tree planting works by the engagement of specialized contractor organizations.  Q Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  A National ESIA Coordinator, Environmental impact and cultural monuments were considered and all options were studied in detail by archaeologists. The most acceptable option was chosen. 76 historical and cultural monuments have been identified along the project, most of which will be affected. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation.  In addition, measures to minimize the impact of vibration on historical and cultural monuments during the construction works are planned in the ESIA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by the vibration.  Q Lead specialist of the Urban When will the road construction work begin?	Р	of Development Programs, Tourism, Trade, Service and	saplings in advance in order to use them in future tree planting
of Development Programs, Tourism, Trade, Service and Advertising  A National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC  At It	A		carry out tree planting works by the engagement of specialized
Environmental impact assessment specialist, "ATMS Solutions" LLC  Were studied in detail by archaeologists. The most acceptable option was chosen. 76 historical and cultural monuments have been identified along the project, most of which will be affected. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation.  In addition, measures to minimize the impact of vibration on historical and cultural monuments during the construction works are planned in the ESIA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by the vibration.  Q Lead specialist of the Urban When will the road construction work begin?	Q	of Development Programs, Tourism, Trade, Service and	lands of the Sisian enlarged community, and also adjoins several historical and cultural sites. Why was this route
historical and cultural monuments during the construction works are planned in the ESIA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by the vibration.  Q Lead specialist of the Urban When will the road construction work begin?	A	Environmental impact assessment specialist, "ATMS	were studied in detail by archaeologists. The most acceptable option was chosen. 76 historical and cultural monuments have been identified along the project, most of which will be affected. Mitigation measures have been developed for all affected historical and cultural monuments and financial means will be provided for their implementation.
			historical and cultural monuments during the construction works are planned in the ESIA. Citing Vorotnavank as an example, he mentioned that it is located at a distance of about 200 m from the source of vibration and will not be affected by
	Q		When will the road construction work begin?







A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	The stage of public consultations ends on December 1 of this year, as a result of which the ESIA package will be updated and presented to the Client to organize further processes.
A	Environmental Impact Specialist, RD	In terms of timing, the works are planned to start in the spring of 2024, but since it is currently in the design phase, discussions are being held with financing banks. After the discussions, the financing phase will follow, after which the works will start.
Q	Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising	In addition, the rivers that will cross the road will be at great risk of pollution. This issue was also raised during the national EIA public discussions.
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Oil traps will be installed at all important locations to prevent oil from cars leaking into the water environment.
Q	Lead specialist of the Urban Development Department	How can the implementation of construction works damage the infrastructures of settlements?
A	Environmental Impact Specialist, RD	Apart from infrastructure improvement works, the latter are not expected to be affected, as all necessary measures for infrastructure maintenance are envisioned.
A	Environmental impact assessment specialist, ADB	Usually, in the international contracts signed with the construction contractor, there are mandatory clauses that require restoring to the original state or appearance all those infrastructures that have been damaged or affected to some extent during the construction.
Q	Lead specialist of the Urban Development Department	Is it planned to build shopping or recreation points next to the operated road?
A	Head of Social Impact Management Service, RD	The design has already been completed and it has already been summarized as a road construction project. And as for the future, those proposals will definitely be taken into account at certain stages of the construction works. At this stage, within the framework of the project, in the vicinity of the road, such infrastructures facilities are not planned. The project envisages only the construction of the road, and proposals for the construction of infrastructure, which will be aimed at increasing the living standards of the community or ensuring employment, will definitely be taken into account later.
Q	Lead specialist of the Department of Development Programs, Tourism, Trade, Service and Advertising	When will the next meeting be?
A	Environmental Impact Specialist, RD	In the future, the 4th public discussion under the national ESIA will be held, which will probably take place in mid-October. The discussion is the last within the international ESIA process. Referring to the monuments of historical and cultural value, we should note that a meeting regarding the latter will be held in Yerevan in the near future and all those who wish, can participate in that meeting and raise their concerns and suggestions.

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC

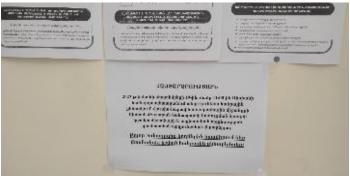
















#### Annex 6. MINUTES OF MEETING NO.2, AGHITU, 19.09.2023

Date Location		Time	Number of participants (of whom women)	
	19.09.2023 Syunik region, Aghitu settlement		14:00	20 (16)

#### Agenda

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

#### **Participants**

1 Administrative Head of Aghitu Settlement 2 Second category specialist of the Revenue Accounting and Collection D Aghitu Settlement Administration 3 Kindergarten, Aghitu Settlement 4 Resident 5 Resident 6 Resident 7 Resident 8 Resident 9 Resident 10 Resident 11 Resident	Department,
Aghitu Settlement Administration  3 Kindergarten, Aghitu Settlement  4 Resident  5 Resident  6 Resident  7 Resident  8 Resident  9 Resident  10 Resident	Department,
4 Resident 5 Resident 6 Resident 7 Resident 8 Resident 9 Resident 10 Resident	
5 Resident 6 Resident 7 Resident 8 Resident 9 Resident 10 Resident	
6 Resident 7 Resident 8 Resident 9 Resident 10 Resident	
7 Resident 8 Resident 9 Resident 10 Resident	
8 Resident 9 Resident 10 Resident	
9 Resident 10 Resident	
10 Resident	
11 Resident	
12 Resident	
13 Environmental Impact Specialist, Road Department	
14 Head of Social Impact Management Service, Road Department	
15 Project Engineer, Road Department	
16 Analyst of the European Bank for Reconstruction and DeGlopment (EB	RD)
17 Environmental impact assessment specialist, Asian Development Bank	(ADB)
18 Social specialist, "ATMS Solutions" LLC	
19 Environmental impact assessment specialist, "ATMS Solutions" LLC	
20 ESIA specialist, "ATMS Solutions" LLC	

#### **Summary**

During the meeting, National ESIA Coordinator / Environmental impact assessment specialist and Social specialist, "ATMS Solutions" LLC, delivered the presentation which covered the Project's background including the primary technical components and the results of the ESIA. They presented the significant environmental and social impacts that could arise during the construction and operation phases of the Project, including its impacts on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of land acquisition and compensation, and grievance mechanism. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

#### Question (Q) - Answer (A)

_			
	Q	Second category	Please clearly show the outline of the road to find out which residents'
		specialist of the Revenue	lands will be affected by the construction of the road.
		Accounting and Collection	·
		Department	







A	Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	The layout of the planned road was shown to the residents using a projector.
A	Project Engineer, RD	At the same time Project Engineer tried to show the outline of the road on the computer to make it more visual.
Q	Resident	When will the land expropriation and compensation process be implemented?
A	Head of Social Impact Management Service, RD	The project will be implemented by the "Road Department" Fund. Being the head of its social department, I can say that our department will deal with the issues of land expropriation and compensation, as well as consideration of possible complaints. The construction works will probably start in spring of 2024.  Until then, detailed land surveying works will be carried out. A specialized company will also be involved in the surveying of lands to be expropriated. The persons who will have lands subject to expropriation have the opportunity to use their lands before the start of construction works. The amount of affected land will be in the contract. Information leaflets were distributed to the residents, in which all the stages of the above are reflected. The last page of the leaflet contain all the necessary contact information for making suggestions and complaints.
Q	Resident	The owner of our land was my husband, who died. We have been informed that assistance will be provided with inheritance and other legal issues.
A	Head of Social Impact Management Service, RD	Yes, within the framework of the Project, the issues related to the inheritance acceptance process will be regulated with the help of the lawyers of the relevant consulting organization, and appropriate payments will be made at the expense of the Project budget. If you are not able to solve this issue on your own, then we will provide that support.
Q	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Are there any other questions?
А	Resident	My house is very close to an active road and the noise caused by the flow of cars is very disturbing. There is concern that this problem will be more disturbing during the construction of the road.
A	Coordinator,	During the construction and further operation of the project, noise mitigation measures will be applied, particularly in the areas where the road will pass near the settlements, noise-absorbing barriers will be installed, which will significantly reduce the impact of noise on the neighboring settlements.

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC



















#### Annex 7. MINUTES OF MEETING NO.3, DARBAS, 19.09.2023

	Date	Location	Time	Number of participants (of whom women)
19.09.2023 Syunik region, Darbas settlement		16:00	13 (6)	

## **Agenda**

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

## **Participants**

1	Administrative head of Darbas settlement	
2	Second category specialist of the Revenue Accounting and Collection Department, Darba settlement administration	
3	3 Employee of Darbas settlement administration	
4	Resident	
5	Resident	
6	Environmental impact specialist, Road Department	
7	Head of Social Impact Management Service, Road Department	
8	Project Engineer, Road Department	
9	Analyst of the European Bank for Reconstruction and DeGlopment (EBRD)	
10	Environmental impact assessment specialist, Asian Development Bank (ADB)	
11	Social issues specialist, «ATMS Solutions» LLC	
12	Environmental impact assessment specialist, «ATMS Solutions» LLC	
13	ESIA specialist, «ATMS Solutions» LLC	

## **Summary**

National ESIA Coordinator / Environmental impact assessment specialist and Social specialist, "ATMS Solutions" LLC, presented the background of the Project, the main technical components, the results of the ESIA, including the main environmental and social impacts caused by the implementation of the Project on the physical, biological, historical, cultural and socio-economic environments, for the construction and operation, as well as the mitigating and monitoring measures, the stages of property expropriation and compensation principles, grievance mechanism, etc. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

Q	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Which historical and cultural places do the residents mostly visit?
Α	Residents	We visit almost all historical and cultural places in the area.
S	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	It is possible that during the construction of the road, the access to these cultural monuments will be temporarily difficult.
А	Residents	We believe that there will be no obstacles to access those places, and if there are, it will be temporary.
Q	ESIA specialist, "ATMS Solutions" LLC	As part of the land expropriation works, measurement of land to be expropriated, calculation of harvest and other related works should be carried out. Whether such works have already been carried out in the settlement or not?







A	Residents	Yes, they were implemented. Description protocols were made. The records, in which there were inconsistencies and inaccuracies, should be changed.
A	Resident	There is also disagreement on the issue that the resident wants to expropriate the entire plot, because the remaining plot, which is not subject to expropriation, can no longer be used for agricultural purposes.
Q	Resident	When will the road construction work begin?
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	The stage of public consultations ends on December 1 of this year, as a result of which the ESIA package will be updated and presented to the Client to organize further processes.
Q	Resident	The road will go through the center of my plot, dividing the land. I have been informed that there will be barriers along that section of the road, which will not allow me to carry out activities on my land adjacent to the road. How could we solve that issue?
А	Social specialist, "ATMS Solutions" LLC	That issue should be agreed with the municipality. Solutions may be found to allow road users to use the services offered in your area.
S	Resident	I think that the implementation of this Project is impossible in the current situation of the country, because there are many other hindering circumstances.
A	Environmental impact assessment specialist, ADB	The construction of the road is of strategic importance for our country. Our government is doing everything possible to implement this plan. All companies and individuals involved in project work are doing everything possible to have comprehensive study and proper management of the work.

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC













#### Annex 8. MINUTES OF MEETING NO.4, LOR, 19.09.2023

Date	Location	Time	Number of participants (of whom women)
19.09.2023р. Syunik region, Lor settlement		17:30	15 (6)

#### Agenda

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

#### **Participants**

<ol> <li>Administrative head of Lor settlement</li> <li>School of Lor settlement</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Head of Social Impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> <li>ElA specialist, "ATMS Solutions" LLC</li> </ol>		
<ol> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	1.	Administrative head of Lor settlement
<ol> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	2.	School of Lor settlement
<ol> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Resident</li> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	3.	Resident
<ol> <li>Resident</li> <li>Resident</li> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	4.	Resident
<ol> <li>Resident</li> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	5.	Resident
<ol> <li>Environmental impact specialist, Road Department</li> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	6.	Resident
<ol> <li>Head of Social Impact Management Service, Road Department</li> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	7.	Resident
<ol> <li>Project engineer, Road Department</li> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	8.	Environmental impact specialist, Road Department
<ol> <li>Analyst of the European Bank for Reconstruction and Development (EBRD)</li> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	9.	Head of Social Impact Management Service, Road Department
<ol> <li>Environmental impact assessment specialist, Asian Development Bank (ADB)</li> <li>Social issues specialist, "ATMS Solutions" LLC</li> <li>Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ol>	10.	Project engineer, Road Department
<ul> <li>13. Social issues specialist, "ATMS Solutions" LLC</li> <li>14. Environmental impact assessment specialist, "ATMS Solutions" LLC</li> </ul>	11.	Analyst of the European Bank for Reconstruction and Development (EBRD)
14. Environmental impact assessment specialist, "ATMS Solutions" LLC	12.	Environmental impact assessment specialist, Asian Development Bank (ADB)
	13.	Social issues specialist, "ATMS Solutions" LLC
15. EIA specialist, "ATMS Solutions" LLC	14.	Environmental impact assessment specialist, "ATMS Solutions" LLC
	15.	EIA specialist, "ATMS Solutions" LLC

#### **Summary**

During the meeting, National ESIA Coordinator, Environmental impact assessment specialist and Social specialist, "ATMS Solutions" LLC, delivered the presentation which covered the Project's background including the primary technical components and the results of the ESIA. They presented the significant environmental and social impacts that could arise during the construction and operation phases of the Project, including its impacts on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of land acquisition and compensation, and grievance mechanism. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

S	Residents	There should be at least 3 cattle passages in the village.
A	National ESIA Coordinator, Environmental impact assessment	In the territory of Lor settlement, one cattle pass is already designed and several passages were proposed by residents during the public discussions from which 1 or 2 will be chosen and others considered with some adjustments.







	specialist, "ATMS Solutions" LLC	
S	Environmental Impact Specialist, RD	The passages that are technically feasible will be built. The location of the passages can be proposed by Lor settlement as a result of a joint discussion.
S	Resident	Along with animal passages, there should also be passages for agricultural vehicles to carry out cultivation of land-plots.
Q	Administrative head of Lor settlement	How will the safety of the houses be ensured from rockfalls occurring during the construction?
A	Environmental Impact Specialist, RD	Appropriate measures will be planned for this, including, for example, netting and fencing of rockfall areas. Alienation can also be considered as an alternative. However, it is a technical question, to which a clear answer cannot be given at the moment. Proper solutions for such cases will be proposed by the technical team.
S	Residents	Expressed their concern about that issue.
S	Residents	As a result of the land acquisition survey, description protocols will be prepared.
A	Head of Social Impact Management Service, RD	The works of land survey and description records are still ongoing. All inconsistencies will be corrected. If there are again disagreements regarding the description protocols, then the latter will be subject of changing. You will sign the version of the description protocol with which you fully agree. In addition, there is a grievance mechanism that allows residents to submit their questions, suggestions and complaints at any time.
Q	Social specialist, "ATMS Solutions" LLC	Are there many cases of disagreement regarding the description protocols in the settlement?
Α	Resident	There are many disagreements because there are many cadastral deviations.
A	Head of Social Impact Management Service, RD	We will try to correct all cadastral deviations during the project implementation phase. But it is not possible in all cases. If the deviation is large and refers to the entire settlement, then other principles apply, for example, the method of correcting this deviation at the expense of communal land, etc.
Q	Resident	How will the issue of transfer of inheritance be resolved if the land owners have died?
Α	Head of Social Impact Management Service, RD	If there are documentary grounds, then the issue can be resolved very easily. Before land acquisition, we will help you in this matter.
S	Resident	It would be desirable that the discussions at the upcoming meeting related to land expropriation be carried out with a map where the land areas can be clearly seen. It is very difficult and in some cases impossible to carry out the allocation of land with only cadastral codes.
А	Social specialist, "ATMS Solutions" LLC	Future land acquisition discussions will be conducted by all means necessary to help identify plots of land.

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist









# Annex 9. MINUTES OF MEETING NO.5, YEREVAN, 25.10.2023 ('THE GENERAL E&S TOPICS MEETING')

Date	Location	Time	Number of participants (of whom women)
25.10.2023	Yerevan	14:00	33 participants: 26 off-line and 7 on-line
			(15)

#### **Agenda**

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

# **Participants**

1	RA Ministry of Internal Affairs: head of the population protection department of the rescue	
	service	
2	RA Ministry of Environment: Chief speci of the forest policy department	
3	RA Ministry of Environment: Chief specialist of the Lands and Subsoil Policy Department	
4	RA Ministry of Internal Affairs, "National Technical Security Center" deputy head of SNOC	
5	RA Ministry of Internal Affairs, head of the Road department of the Police	
6	RA Ministry of Internal Affairs, Chief specialist of the Road department of the Police	
7	RA Ministry of Environment, Chief specialist of the forest policy department	
8	RA Ministry of Health, Employee	
9	RA Ministry of Environment, Employee	
10	Lead specialist of the RA Ministry of Environment: "Environmental Impact Expertise Center"	
	SNOC	
11	Expert of the RA Ministry of Territorial Administration and Infrastructures	
12	Expert of the RA Ministry of Territorial Administration and Infrastructures	
13	Resettlement specialist of "ATMS Solutions" LLC	
14	"Road Department" Foundation, Project Manager	
15	RA Ministry of Environment: Deputy Chairman of the Forestry Committee	
16	RA Ministry of Environment, Forestry Committee: Head of the Department of Management of	
	Forests and Forest Lands	
17	Director of "Hayantar" SNOC	
18	Employee of the "Road Department" Foundation	
19	Director of "Zangezur" biosphere complex SNOC	
20	Environmental impact specialist, Road Department	
	Project engineer, Road Department	
22		
23		
24		
25	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	
	ESIA specialist, "ATMS Solutions" LLC	
27		
28	, ,	
29	Associate Environmental and Social Adviser, EBRD (online)	
30	Senior Social Adviser, EBRD (online)	
31	Environmental Specialist, EIB (online)	
32	· · · · · · · · · · · · · · · · · · ·	
33	Social Safeguards Specialist, ADB (online)	
	Cooks: Carogaarao Opoolanoi, Fibb (orinto)	

# Summary

Project Manager, RD, presented the background of the Project, after which National ESIA Coordinator / Environmental impact assessment specialist, Social specialist, and Resettlement Specialist, "ATMS Solutions" LLC, delivered the presentation covering the background of the Project and ESIA, the main technical components, the results of the ESIA, the significant







environmental and social impacts that could arise during the construction and operation phases of the Project, including its impacts on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of land acquisition and compensation, and grievance mechanism. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

Q	RA Ministry of Environment: Chief specialist of the Lands and Subsoil Policy Department	What kind of lands are included in the design of the road under construction?
A	Project Manager, RD	The lands included in the design of the road under construction are communal, private property and forest lands.
Q	RA Ministry of Environment: Chief specialist of the Lands and Subsoil Policy Department	Has the Environmental Impact Assessment conclusion of the Project been received?
A	Project Manager, RD	It was received in 2018, however, since the EIA conclusion was cancelled one year after the date of approval, the national ESIA process of the Project is currently being carried out again.
Q	Director of "Hayantar" SNOC	Can you say what kind of land is mostly included in the plan based on the information provided by the cadastral committee?
A	Environmental impact specialist, RD	The lands included in the plan are mostly private lands, but there are also forest lands that will later be recognized as superior interest.
Q	Director of "Hayantar" SNOC	In that case, how will the process of cutting the existing trees on those lands and their compensation be carried out?
A	Environmental impact specialist, RD	After recognizing these lands as a superior interest, the construction contractor company will receive a permit to cut down these trees during the construction work.
		In lieu of the trees to be cut, tree planting works will be carried out in the areas indicated/selected by the state. The number and type of trees will depend on the number and type of trees being cut. Preference will be given to local species. Planting works will be carried out in accordance with all international standards.
		In particular, according to international requirements, 6 trees will be planted instead of each cut tree with a diameter greater than 10 cm, and 10 trees will be planted for each tree included in the Red Book.
Q	RA Ministry of Environment, Chief specialist of the forest policy department	In addition to international standards, why don't we also use the relevant provisions of local legislation on forest protection, which are perhaps stricter than international requirements?
		For example, according to national standards, restoration of planted trees is carried out not by tree units, but by area (1 to 2). In other words, an area twice as large as the area subjected to tree cutting should be restored.
A	Environmental impact assessment specialist, ADB	The choice of local and international standards and laws will depend on their degree of strictness. If the local requirements in this area are more stringent than the international requirements, then the local requirements will apply, if not, then the international requirements will apply.
S	Director of "Hayantar" SNOC	However, I believe that even after recognizing the lands lying in the plan as a superior interest, the tree felling works in those areas should be carried out with the participation of the forestry







		representative of the given area and his instructions. Such works cannot proceed without the participation of a forestry representative, regardless of whether or not the area is recognized as a superior interest and does not belong to forestry.	
A	Project Manager, RD	As far as I am informed, after recognizing the territory as a superior interest, people from forestry will not participate in the tree cutting works, because that territory will no longer belong to them. However, at that stage, the works will be carried out in accordance with the requirements of the current legislation.	
Q	RA Ministry of Internal Affairs, Chief specialist of the Road department of the Police	What method will be used to build tunnels in rocky areas?	
Α	Project Manager, RD	The blasting method will be used for the construction of the tunnels.	
Q	RA Ministry of Internal Affairs, Chief specialist of the Road department of the Police	Is it not possible to use modern techniques that will exclude the implementation of works by the blasting method, taking into account the fact that a large amount of dust and noise will be generated as a result of blasting?	
A	Project Manager, RD	It takes a lot of time and a lot of money to bring such equipment to Armenia. In addition, even if the equipment is acquired, it will take months to transport it to the intended site of operation due to the narrow and difficult roads, the steep terrain of the region, and the sheer volume of equipment to be transported. It should also be taken into account that not one but several tunnels will be built and that equipment will need to be transferred to another construction site.	
Q	RA Ministry of Environment: Chief specialist of the Lands and Subsoil Policy Department	What will be the fate of the spoil taken during the construction of the road?	
Α	Project Manager, RD	In the project region, a number of places were studied and selected, where the spoil excavated during the construction of the road will be placed.	
Q	RA Ministry of Internal Affairs, "National Technical Security Center" deputy head of SNOC	<ul> <li>I have a number of technical questions, namely:</li> <li>Has the Project passed state comprehensive examination?</li> <li>Is the system of furnishing the project signs and markings developed?</li> <li>Have the geohazards of the project been assessed? Seismicity considered in the design?</li> <li>Is there a road network development strategy in Armenia?</li> </ul>	
A	Project Manager, RD	Project Manager, RD presented the answers to all the questions in detail. In brief, the Project passed state comprehensive examination in 2020; a road marking project is envisioned; geological studies including risk assessment and modelling of geohazards are ongoing; the design was developed considering the seismic conditions and in line with the national and international standards.	

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC

















# Annex 10. MINUTES OF MEETING NO.6, YEREVAN, 26.10.2023 ('THE BIODIVERSITY MEETING')

Date	Place	Time	Number of participants (of whom women)
26.10.2023	Yerevan	14:00	26 participants: 19 off-line and 7 on-line (14)

#### Agenda

Public consultations on the results of the Project's impact on the biodiversity of the region as part of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

#### **Participants**

1	RA Ministry of Environment, Chief specialist of the Lands and Subsoil Policy Department	
2	Project Biodiversity expert & Biodiversity coordinator	
3	RA Ministry of Environment: Chief specialist of the Specially Protected Natural Areas and Biodiversity Policy Department	
4	Lead specialist of RA Ministry of Environment, "Environmental Impact Expertise Center" SNCO	
5	RA Ministry of Environment, Deputy Chairman of the Forestry Committee	
6	RA Ministry of Environment, Forestry Committee: Head of the Department of Management of Forests and Forest Lands	
7	RA Ministry of Environment, Forest policy department	
8	Director of "Biogeotech" LLC	
9	"Ecoteam" NGO	
10	Botanist, Project Expert	
11	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment	
12	Employee of the "Road Department" Foundation	
13	Director of "Zangezur" biosphere complex SNCO, under the Ministry of Environment	
14	Environmental impact specialist, Road Department	
15	Project engineer, Road Department	
16	Financial analyst at the European Bank for Reconstruction and Development (EBRD)	
17	Environmental impact assessment specialist, Asian Development Bank (ADB)	
18	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	
19	ESIA specialist, "ATMS Solutions" LLC	
20	Project manager, Ecoline international Ltd. (online)	
21	Head of Sector Infrastructure, Environment & Sustainability Department, EBRD (online)	
22	Associate Environmental and Social Adviser, EBRD (online)	
23	Senior Social Adviser, EBRD (online)	
24	Environmental Specialist, EIB (online)	
25	Senior Social Safeguards & Resettlement Consultant, EIB (online)	
26	Social Safeguards Specialist, ADB (online)	

#### **Presentation**

National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC and Project Biodiversity expert & Biodiversity Coordinator delivered the presentation that covered the background of the Project, the main technical components, the results of the ESIA, emphasizing the specifics of the baseline biodiversity studies and impacts of the Project on the biodiversity of the area, as well as the main provisions of the Biodiversity Action Plan.







Q	RA Ministry of Environment, Forest policy department	In the information presented, I did not notice that there were any words about the mammals, birds, fish and other animal species present in the forest areas under the road construction. There was no information about both biodiversity and trees.  And please clarify, when it comes to "Emerald" network areas, we are talking about registered or candidate areas.
A	Project Biodiversity expert & Biodiversity coordinator	All habitats, forests, steppes, meadows, areas covered with alpine vegetation and areas covered with vegetation in general were studied within the road influence area. All project occupied areas and species compositions are included in the report. It can be said that in terms of biodiversity, forests and steppes do not differ in their value. However, even in arid and sparsely vegetated areas, Red Book and endemic plant species can be observed, which are also important and have been identified.  In terms of the second question, we currently do not have the existing / approved "Emerald" network in Armenia. All "Emerald" network areas in Armenia are candidate sites.
S	RA Ministry of Environment: Chief specialist of the Specially Protected Natural Areas and Biodiversity Policy Department	These "Emerald" areas are currently candidate areas and are subject to review.
S	Director of "Zangezur" biosphere complex SNCO, under the Ministry of Environment	According to the project design document and the EIA report, part of the tunnel under construction is located in the territory of "Zangezur" biosphere complex.
A	Project Biodiversity expert & Biodiversity coordinator	Maybe I did not sound clear, but the tunnel passing through the rock is located underground the territory of the "Zangezur" biosphere complex, and the entrance and exit of the tunnel are located outside the territory of the "Zangezur" biosphere complex.
S	Lead specialist of RA Ministry of Environment, "Environmental Impact Expertise Center" SNCO	According to the received information, the entrance and exit of the tunnel are located in the territory of the "Zangezur" biosphere complex <sup>11</sup> .
S	Project Biodiversity expert & Biodiversity coordinator	All the necessary studies have been carried out, which prove that these areas are not located in the territory of the "Zangezur" biosphere complex.
Q	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment	As a result of the discussion, it became clear that six thousand trees will be cut. Can you tell me if there are preliminary calculations of the trees to be cut, as well as what kind of trees they are, how many of them are registered in the Red Book of the Republic of Armenia, and how many other types of trees or bushes are in quantity?
Q	RA Ministry of Environment, Deputy Chairman of the Forestry Committee	In addition, he asked who did the counting of trees and did they count only by tree or also by tree diameter and stock, because it is a very important question.
A	Botanist, Project Expert	It will take years to individually characterize each tree to be cut. Counting was done only in target locations. Only one type of juniper is registered in the RA Red Book, but it does not grow in the area of the project. There are other tree species registered in the RA Red Book, for example, bell-shaped hawthorn, pear species, but they are rarely found in the area of the project. In general, very few of the trees registered in the RA Red Book fall in the road construction zone.
Q	RA Ministry of Environment, Forest policy department	There are 57 natural monuments in Syunik region. Please detail what kind of impacts are expected on these natural monuments as a result of the road construction.

<sup>&</sup>lt;sup>11</sup>During further clarifications, the inquirer agreed that neither the entrance nor the exit of the tunnel are located in the area of the Zangezur biosphere complex.







Α	National ESIA Coordinator,	As a result of the study, the natural monuments that are located	
	Environmental impact assessment specialist, "ATMS Solutions" LLC	within the area of Project influence were identified and mapped. We will send the volume and section of the ESIA report in which the noted information is given <sup>12</sup> .	
S	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment		
А	Botanist, Project Expert	There were no tasks of performing quantitative and dimensional assessment of trees. Main works were dedicated to the assessment of biodiversity and identification of Red Book species.	
А	Environmental Impact Specialist, RD	Regarding the tree cutting, I would like to draw your attention to the national EIA report, where it is clearly defined how many trees will be cut in which area. Please review that section.	
In addition, the report also related mitigation measure within international ESIA, b within the framework of our related mitigation.		In addition, the report also contains information on forest lands and related mitigation measures. These discussions were conducted within international ESIA, but we also have the studies carried out within the framework of our national EIA, where the answers to all the questions that concern you are presented in detail.	
Q	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment		
А	Environmental Impact Specialist, RD	Of course yes. In addition, the public discussions are also aimed at ensuring that all suggestions and comments are studied and included in both local and international EIA reports, if necessary.	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	The international ESIA was carried out on a more global scale. We have been tasked with conducting an overall assessment to identify affected and critical habitats, affected fauna and flora species, etc.	
Q	RA Ministry of Environment, Deputy Chairman of the Forestry Committee	What coefficients were used to recalculate the number of trees to be planted?	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Since the question is highly specific, we will ask you to submit it to us in written form so that your question can be answered not only by our local experts, but also by the international expert group and specialists involved.	
S	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment	We would also ask to take into account the requirements of our national legislation, which states that for every tree to be cut two trees shall be planted.	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	As mentioned in the previous discussion, international requirements are stricter and unlike local requirements, six trees must be planted for every tree to be cut.	
A	Environmental impact assessment specialist, ADB	An environmental and social management plan has been developed within the international ESIA study, where all measures are presented in detail, where and what works should be carried out. I would ask to review this plan, paying particular attention to the biodiversity action plan. If after review you have additional recommendations, we will ask you to submit them in written form to discuss and include your recommendations into the relevant documents.	
S	Environmental Impact Specialist, RD	Once again mentioned the link through which one can get acquainted with the Armenian and English versions of the ESIA report. They are posted on the website of the "Road Department" Foundation in the "Environmental Safety" sub-section of the "Environmental Reports"	

 $<sup>^{\</sup>rm 12}$  The information was sent after the meeting.







		section for the Sisian-Kajaran Road. In addition, the documents were emailed to all concerned government agencies.  We would ask that all opinions related to the national EIA and	
		international ESIA be given separately, to ensure the correct course of work.	
Q	RA Ministry of Environment, Forestry Committee: Head of the Department of Management of Forests and Forest Lands	Annex 1 of the relevant Government decision on recognition of the dominant interest includes in particular three land plots with cadastral codes that include 915 ha of forest state lands. Will the designated purpose of all those plots be changed, or only the sections through which the newly constructed highway will pass?	
A	Environmental Impact Specialist, RD	All coordinates of expropriated lands, as well as the categories of lands subject of changing, are indicated in the Government decision on the recognition of the dominant interest.	
Q	RA Ministry of Environment, Forest policy department	How many migration routes for animals are envisioned by the Project design document?	
A			
S	RA Ministry of Environment, Forestry Committee: Head of the Department of Management of Forests and Forest Lands	Since 2020, a program establishing a regime for the protection of inter-rational roads of wild animals is being implemented on a contractual basis with the communities. As of today, in Syunik and Vayots Dzor marzes, there are some areas of migration routes of wild animals, which are under protection within the framework of these agreements. It is about eco-corridors, which are also mapped.	
A Project Biodiversity expert & Our study is about the migration routes the Biodiversity coordinator the Sisian-Kajaran road.		•	
3	Environmental Impact Specialist, RD	Are the cameras installed to detect and identify wild animal species in the nature currently being used? And is it possible to use those cameras for monitoring activities in the future?	
A	Project Biodiversity expert & Biodiversity coordinator	Data collected by the cameras are archived and accessible. As for future monitoring with cameras, these cameras can be installed in the same manner and in the same places to carry out continuous monitoring. To be on the safe side, the cameras are currently removed from the site, but they may be re-installed in the future for monitoring purposes.	
S	Director of "Zangezur" biosphere complex SNCO, under the Ministry of Environment	As of now, the cameras have been removed. However, I consider it necessary to continue recording with cameras where possible and accessible. I would even suggest, if possible, to install "live" cameras, which will allow, in addition to monitoring, to record poaching cases as well.	
S	Director of "Biogeotech" LLC	I want to express my gratitude for support that allowed to identify many important animal species in the "Zangezur" biosphere complex through installation of cameras. After the construction of the road, these cameras can be installed again to continue monitoring as well as to compare past and current conditions.	
Q	"Ecoteam" NGO	What kind of impact is expected on the course of rivers and streams?	
А	Project Biodiversity expert & Biodiversity coordinator	In general, there will be no changes in the course and direction of rivers and creeks as a result of the Project implementation.	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Bridges will be built in order to protect the course of the rivers, thereby avoiding the change of the course of the rivers.	
Q	Director of "Zangezur" biosphere complex SNCO, under the Ministry of Environment	How will the conservation of nature be implemented during the construction of the road and who will control it?	







A	Environmental impact assessment specialist, ADB	Usually, such projects are implemented in accordance with the contract that has a special section dedicated to the terms and conditions of work implementation. Control and monitoring of activities of the contractors through appropriate management plans is an obligatory provision of such type of contracts. In general, the noted control and monitoring is carried out by the technical supervision engineer.	
Q	Director of "Zangezur" biosphere complex SNCO, under the Ministry of Environment	, ,	
A	Environmental impact assessment specialist, ADB	As this Program is considered very "sensitive", monitoring will be carried out by an independent external company, affiliated with neither construction contractor nor the Road Department. For this purpose, a terms of reference will be prepared and a tender will be announced. You can apply for participation in that tender.	
S	Director of "Hayantar" SNCO, under the Forestry Committee, Ministry of Environment		
A	Environmental Impact Specialist, RD	"Hayantar" SNCO is not mentioned, but the term "relev departmental bodies" mentioned in the report implies the involvem of "Hayantar" SNCO as well.	

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC











# Annex 11. MINUTES OF MEETING NO.7, YEREVAN, 27.10.2023 ('THE CULTURAL HERITAGE MEETING')

Date	Place	Time	Number of participants (of whom women)
27.10.2023	Yerevan	14:00	22 participants: 15 off-line and 7 on-line
			(14)

#### Agenda

Public consultations on the results of the Project's impact on the historical and cultural heritage of the region as a part of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

# **Participants**

1	Institute of Archeology and Ethnography of the RA NAS, Project Expert	
2	Territorial Development Fund of Armenia, Chief Accountant	
3	NGO «Guides in the South»	
_		
4	«Road Department» Foundation, responsible for human resources	
5	RA Ministry of Education, Science, Culture and Sports, specialist	
6	«ICOMOS/Armenia» NGO, Architect	
7	«ICOMOS/Armenia» NGO, Architect	
8	«Road Department» Foundation, Project Manager	
9	Environmental impact consultant, Asian Development Bank (ADB)	
10	«Road Department» Foundation, specialist	
11	«Road Department» Foundation, Environmental impact specialist	
12	«Road Department» Foundation, Project engineer	
13	Environmental impact assessment specialist, Asian Development Bank (ADB)	
14	Project co-manager, environmental expert «ATMS Solutions» LLC	
15	ESIA specialist, «ATMS Solutions» LLC	
16	Project manager, Ecoline international Ltd. (online)	
17	Head of Sector Infrastructure, Environment & Sustainability Department, EBRD (online)	
18	Associate Environmental and Social Adviser, EBRD (online)	
19	Senior Social Adviser, EBRD (online)	
20	Environmental Specialist, EIB (online)	
21	Senior Social Safeguards & Resettlement Consultant, EIB (online)	
22	Social Safeguards Specialist, ADB (online)	

# Summary

National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC and Institute of Archeology and Ethnography of the RA NAS, Project Expert, delivered the presentation covering the background of the Project, the main technical components, methodological approach to the cultural heritage baseline studies, and ESIA results emphasizing the specifics of the impact of the Project on the historical and cultural heritage. The units and types of the affected historical and cultural heritage, the measures designed to mitigate the impact of the Project and the budget were presented.







Q	"ICOMOS / Armenia" NGO	It was noted that there are 10 monuments of national significance in the Project area. I would like to know if there are cases where these monuments are completely located in the zone of Project influence.	
		My second question is that such large-scale works can have a very serious impact on the development of tourism in the region, having a number of other positive aspects.	
		Therefore, for such a large volume of works, a separate study will be required, with a process representing team work, in which urban planners should also be involved. I would like to know if you worked specifically with urban planners at this stage of the Project implementation.	
A	Institute of Archeology and Ethnography of the RA NAS, Project Expert	Unfortunately, when we consider the existing and newly discovered monuments we understand that most of them do not have protection zones. When such projects are implemented and newly discovered CH units are presented to the Ministry, the latter cannot set the statuses and protection zones due to the lack of information related to the newly discovered CH.	
Q	"ICOMOS / Armenia" NGO	In other words, you applied and they didn't give you that information?	
Α	Institute of Archeology and Ethnography of the RA NAS, Project Expert	During the implementation of this project, newly identified CH sites should ge a status, and protection zones should be defined for the old (existing) CH sites In order to provide this, the Ministry should have results of <i>additional</i> surveys in those places, which were not carried out yet.	
A	Project Manager, RD	Regarding the second question, I can say that before the start of the works discussions were held with the communities, when the Project was still in the stage of feasibility study. Starting from the stage of feasibility study, work have been carried out with communities and regional administrations, as we as with relevant authorized bodies. As for the joint works with the urban planning committee, I can say that the project has undergone a special comprehensive examination and the urban planning committee was involved in these works.	
S "ICOMOS / Armenia" The protection zones of tourist zones, are deve		The protection zones of archaeological monuments, as well as the design of tourist zones, are developed and implemented by the architects of the urban planning committee, who have relevant education related to the protection of monuments.	
		As for the conservation zones of the monuments, if they are not defined, then they should be defined. We should strive to minimize the damage in that area. Therefore, I suggest that in parallel with the study of historical and cultural monuments and the identification of their places, their conservation zones should be studied and defined.	
S	RA Ministry of Education, Science, Culture and Sports, specialist  Today, there are more than 1200 historical and cultural monuments Syunik Region. There are also newly discovered monuments that nee studied. During the Soviet years, the historical and cultural monument Syunik Region were hardly studied, and in the following years, it became that there are a number of shortcomings even regarding the consequence.		
A	Institute of Archeology and Ethnography of the RA NAS, Project Expert	Information about all identified monuments is included in the presented report. The results of the previous study were also included in it. However, I would like to inform you that this report is not yet final and it is possible that some changes may be made due to the protection of the monuments. This report refers to the prseliminary description of the target monuments along the road to be constructed.	
S	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Initially, several options were discussed and studied for the selection of the route of the road. As a result, the most appropriate option was chosen.	







S	Institute of Archeology and Ethnography of the RA NAS, Project Expert	3 potential routes were proposed.	
S	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	In addition, mitigation measures have been developed for each monument, for which an appropriate budget and mitigation plan have been established.	
S	"ICOMOS / Armenia" NGO	Since this is a preliminary report, I would like to add that an individual approach should be given to each monument. It is necessary to carry out more in-depth research on the monuments.	
A	Institute of Archeology and Ethnography of the RA NAS, Project Expert	I definitely agree with you, but that stage is carried out after the selection of the construction company.  Institute of Archeology and Ethnography of the RA NAS, Project Expert, then presented the most affected historical and cultural units shown in the presentation, the proposed mitigating measures etc.	
S	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	He presented the impact of the Project on intangible CH values included in the UNESCO and national lists, including lavash, duduk, regional rituals, etc. It was noted that in general, the Project is expected to have a positive impact on the restoration of the culture of intangible heritage values in the region, combined with the development of tourism.	
Coordinator, eff Environmental impact ar assessment specialist, ar "ATMS Solutions" LLC		Presenting the relevant slide of the presentation, he mentioned that there is an effective grievance mechanism established at the Road Department to provide answers/solutions to queries or complaints. You can submit your complaints and suggestions by phone numbers and e-mails mentioned in the given slide. You can submit complaints and suggestions regarding this specific ESIA report and its historical and cultural heritage section until the 1st December, 2023.	

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC











#### Annex 12. MINUTES OF MEETING NO.8, KAJARAN, 02.11.2023

Date	Place	Time	Number of participants (of whom women)
02.11.2023	Syunik region, Kajaran community	14:00	27 (12)

#### **Agenda**

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

#### **Participants**

1	Head of Kajaran Community		
2	Deputy head of Kajaran Community		
3	Head of Department of Environmental Protection, Agriculture and Economic Development Programs, Kajaran Community		
4	Head of Lernadzor village		
5	Operator of the office of the administrative head of Lernadzor		
6	Environmental Impact Specialist, "Road Department" Fund		
7	Environmental Impact Specialist of Asian Development Bank (ADB)		
8	Social expert of Asian Development Bank (ADB)		
9	Specialist of Department of Environmental Protection, Agriculture and Economic Development Programs, Kajaran Community		
10	Lead specialist of Department of Environmental Protection, Agriculture and Economic Development Programs, Kajaran Community		
11	Municipal employee / resident		
12	Municipal employee / resident		
13	Municipal employee / resident		
14	Municipal employee / resident		
15	Municipal employee / resident		
16	Municipal employee / resident		
17	Resident, teacher		
18	Retired resident		
19	Retired resident		
20	Retired resident		
21	Retired resident		
22	Retired resident		
23	Retired resident		
24	Municipal employee		
25	Project co-manager, environmental expert "ATMS Solutions" LLC		
26	Social Expert, "ATMS Solutions" LLC		
27	ESIA specialist, "ATMS Solutions" LLC		

### **Summary**

During the meeting, National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC and Social specialist, "ATMS Solutions" LLC delivered the presentation covering the Project's background and its primary technical components, and the results of the EIA. They discussed the significant environmental and social impacts that could arise during the construction and operation phases of the Project, including its impacts on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of







land acquisition and compensation, and grievance mechanism. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

	Hand of Killing	It is your walnum that all was the immediate be at least of the last	
S	Head of Kajaran Community	It is very welcome that all possible impacts have been taken into account during the environmental and social impact assessment of the road project. It is particularly commendable that, among others, the surrounding visual images for road users and their possible changes have been taken into account.	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	the road of the project, simulations of possible visual landscape changes were done separately and mitigating measures were proposed.	
Q	Deputy head of Kajaran Community	Where will the SDAs be placed?	
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	Actually 8 SDAs have been identified in advance: 5 in Sisian and 3 in Kajaran regions. However, during the study, it was found that the SDAs identified in the Kajaran area are very sensitive from the point of view of biodiversity, and therefore their use as SDA was excluded. The project's technical and environmental experts proposed two additional locations; one near the northern portal of the tunnel (Shenatagh village), and the other near the southern portal in the eastern part of Kirs village. In terms of the 2nd SDA site, a letter to the Kajaran municipality was submitted and a preliminary agreement was obtained.	
S	Deputy head of Kajaran Community	After consultation with the head of community, it has been confirmed that the land near the village of Kirs is suitable for the spoil disposal. This will result in the surrounding area becoming a plain, which can then be used for agricultural or other purposes.	
Q	Head of Kajaran Community	It is very important to connect the existing road near Geghi village to the Project road. People living in that area should be able to deliver their agricultural products to large settlements and sales points.	
A	Social Expert, "ATMS Solutions" LLC	·	
A	Head of Kajaran Community	He noted that they will apply in writing with that proposal. He also requested to record this in the meeting protocol.	
A	Social Expert, "ATMS Solutions" LLC		
A	Head of Kajaran Community	He said that the region is very rich in historical and cultural values and the municipality is also thinking of developing the infrastructure to improve access to these values and increase the attractiveness.	
S	Social Expert, "ATMS Solutions" LLC	One of the negative impacts of the project is the issue of land acquisition. In Geghi-Lernadzor section, around 110 plots of land will be expropriated, of which approximately 22-25 are privately owned. Field research specialists have visited the residents who own these plots of land to discuss the land acquisition and compensation mechanism with them. It is believed that the residents are already familiar with the process, but if not, we can provide them with more information. He added that the assessment of the land acquisition property has been finished. However, in July, the State Committee of	







	Cadastral Committee adjusted the cadastral maps in the Kajaran region, currently about 45 plots of land are subject to reassessment.	
Q	Head of Kajaran Community  He noted that a very important issue is being discussed and residents hat many questions related to this. As an example, he cited the case of a resid who has been living in Lernadzor community for many years, but has so problems with the property certificate.	
A	Social Expert, "ATMS Solutions" LLC He said that the section of Lernadzor is not part of the project of the Sis Kajaran road section. It is related to the Kajaran-Agarak road. That is, cannot give a very specific answer, but we will present the gen mechanisms.	
Q	Residents of Lernadzor settlement, participating in the public disvoiced their problems related to the land acquisition of property of them or used by them.	
A	Social expert of ADB	Presented the approaches and principles of land acquisition and compensation of international financing institutions, mainly the Asian Development Bank, referring to private cases raised by residents.
	Since those cases were not related to the project of the Sisian-Kajaran road section, the details of the discussion of that issue were not recorded. The environmental specialist of the RD collected the data of the residents who raised issues in order to transfer them to the relevant specialists of the RD.	

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator / Environmental impact assessment specialist, "ATMS Solutions" LLC













# Annex 13. MINUTES OF MEETING NO.9, GEGHI, 02.11.2023

# PROTOCOL № 09

Date	Place	Time	Number of participants (of whom women)
02.11.2023	Syunik region, Geghi settlement	16:30	27 (12)

# Agenda

Public consultations on the results of the Environmental and Social Impact Assessment (ESIA) of the North-South Road Corridor Sisian-Kajaran Road Construction Project (the Project).

# **Participants**

1.	Deputy Head of Kajaran community				
2.	Head of Department of Environmental Protection, Agriculture and Economic Development Programs, Kajaran community				
3.	Administrative Head of Geghi village				
4.	Environmental Impact Specialist, "Road Department" Fund				
5.	Environmental Impact Specialist of Asian Development Bank (ADB)				
6.	Social expert of Asian Development Bank (ADB)				
7.	Lead specialist of the RA Ministry of Environment, "Environmental Impact Expertise Center" SNOC				
8.	Municipal employee / resident				
9.	Municipal employee / resident				
10.	Resident				
11.	Resident				
12.	Resident				
13.	Resident				
14.	Resident				
15.	Resident				
16.	Resident				
17.	Resident				
18.	Resident				
19.	Resident				
20.	Resident				
21.	Resident				
22.	Resident				
23.	Resident				
24.	Resident				
25.	Consultant of "Consecoard" LLC				
26.	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC				
27.	Social expert of "ATMS Solutions" LLC				







#### **Summary**

During the meeting, National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC and Social specialist, "ATMS Solutions" LLC delivered the presententation covering the Project's background and its primary technical components, and the results of the EIA. They discussed the significant environmental and social impacts that could arise during the construction and operation phases of the Project, including its impacts on the physical, biological, historical-cultural and socio-economic environments. They also provided information on the mitigation measures, monitoring and management of potential impacts and risks, the principles of land acquisition and compensation, and grievance mechanism. A summary leaflet related to the Project ESIA was disseminated among the participants of the meeting.

Q	Administrative Head of Geghi village	During the recent meeting, a resident raised concerns regarding land evaluation and alienation processes. Specifically, he highlighted that the land acquisition process only covers land plots subject to permanent land acquisition. However, during construction, additional damage may occur to land plots owned by residents, for which no compensation is currently planned.			
S	Social Expert, "ATMS Solutions" LLC	He asked to specify examples of such cases.			
A	Administrative Head of Geghi village	As an example, he mentioned that during pillar installation, machinery can damage agricultural products grown there.			
A	Social Expert, "ATMS Solutions" LLC	In those cases, the construction contractor responsible for the works must reach an agreement with the owners of the affected plots and provide compensation for any damages incurred. However, it is important to note that only permanent land acquisition is eligible for compensation through the property valuation and land acquisition process.			
Q	Administrative Head of Geghi village	There is a house in the Geghavank area, which is located under the bridge pillar. In this case, safety issues may arise.			
A	Social expert of ADB	In such cases, it is necessary to contact with "Road Department" foundation, whose technical and engineering team will assess the problem, including the issue of the property being in the safety zone. If it turns out that the house is located under a bridge and there are security problems, then the house is definitely subject to acquisition.			
Q	Administrative Head of Geghi village	In the plots under the other pillar of the bridge, agricultural products of the residents grow and safety issues may arise again, including during the construction and maintenance of the bridge pillar.			
Α	Social expert of ADB	He again urged to contact with "Road Department" foundation in order to get clarifications from the technical and engineering team. It should be done as soon as possible.			
Q	Social expert of ADB	He asked how far the house was from the pillar of the bridge.			
A	Administrative Head of Geghi village	He replied that the land belonged to one of the residents and he was not able to provide an answer to that question.			
Α	Social expert of ADB	He noted that within 60 days of receiving the notification letter, the owner can apply for the alienation of his remaining non-alienable property.			
Q	Administrative	He answered that 60 days have already passed.			
	Head of Geghi village	He noted that the inter-communal road passes near the tunnel, along which there are houses. Will the tunnel affect them?			







Q	Residents	Residents raised the issue of access to the new road near Geghi.		
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	He answered that this issue was raised today by the head of the Kajaran community. We will make a note of your request and present it to the customer.		
Q	Residents	Won't vibration from construction work affect homes?		
A	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	tor, tental tor, t		
S	National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC	He presented the contact information of the persons responsible for receiving grievances and suggestions and urged all questions to be addressed by phone or e-mail until December 1.		

Prepared by ESIA specialist, "ATMS Solutions" LLC, verified by National ESIA Coordinator, Environmental impact assessment specialist, "ATMS Solutions" LLC













#### Annex 14. PRESENTATIONS

#### General E&S topics

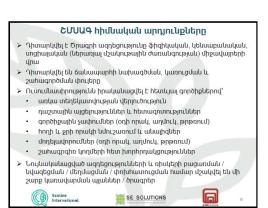












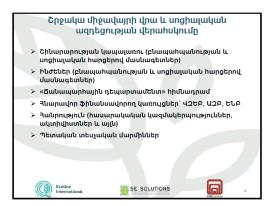




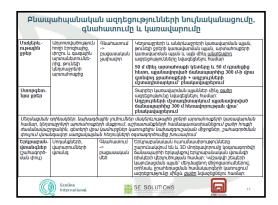




























Սոցիալական ազդեցությունների նույնականացումը, գնահատումը և կառավարումը								
Տնտեսություն	ուսեր, ապրակչների, սարքավորումների և ծառայությունների ծեռք բերումներ, հուրկերի (ձարում, ծախսերի լինայողություն՝ պայնսնավորված ճանապարհորդության ժամանակի և ծախսերի կրճատմամբ, գրուսաշրջության և հանգափ ներուժի ուժեղացում	Գնահատում -> դրական չափավորից մեծ (տեղային), չափավոր (տա- րածաշրջան) և զածր (ազգային)	<ul> <li>Մատակարարում- Ների պլան</li> <li>Յավաքագրժան պլան և քաղաքականու- թյուն</li> <li>Դրական</li> </ul>					
Չբաղվածու- թյուն	Ծրագիրը կարող է ստեղծել 400-500 ուղիղ և 900-1000 անուղղակի աշխատատեղեր		ազդեցությունների աստիճանի բարձրացում					
	Բարելավումների օրինակեր, առաջնահերթություն տալ Միսիան և Քաջարան համայնքներից ապրանքների և ծառայությունների ձեռքբերմանը և զբաղվածությանը							
Յանրային ծա- ռայություններ և տրանսպոր- տային ենթա- կառուցվածք	Լրացուցիչ ճնշում առողջապահական հաստատությունների, տեղական ճանա- պարհների, թափոնների տեղադրման վայրերի և Էլեկտրամատակարարման համակարգերի վրա և այլն	Գնահատում -> բացասական ցածրից չափավոր	Յանրային ծառայություն- ների պաշտպանության և տեղափոխման պլան, Երթևեկության կառա- վարման պլան՝ «փսկերը <u>գածը</u> դարձնելու համար					
	Մեղմացումների օրինակներ. շինհրապարակներում ցանկապատում և մուտքի հսկողություն, համայնքային անվտանգության հարցերով հրահանգավորում							
Յանրային առողջություն և անվտան- գություն	<ul> <li>Ծրագրի տրանսպորտի մասնակցու- թյամբ ճանապարհատրանսպորտային պատահարմերի դիսկնի,</li> <li>Ներգնա աշխատողների կողմից բերված վարակիչ հիվանդություններ</li> </ul>	Ազդեցությունը - > բացասական ցածրից չափավոր	Յանրային առողջության և անվտանգության պլան, Երթևեկության կառավարման պլան և այլն՝ ռիսկերը <u>զածը</u> դարձնելու համար					
Մեղմացումների օրինակներ, շինհրապարակներում ցանկապատում և մուտրի հսկողություն, համայնքային անվտանգության հարցերով հրահանգավորում								





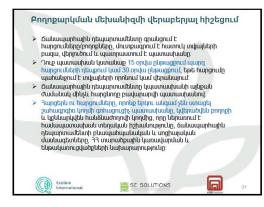












# Ամմիոփում և հետագա քայլեր > ՇՍՍԱԳ փաթեթը ներստում է մի քանի փաստաթղթեր՝ ՇՍՍԱԳ հաշվետվություն, բնապաոսանական և սոցիալական կառակարման ալլան, Բնապահայանական և սոցիալական միջոցառումների պլան, հետաբագնագանության միջոցառումների ալլան, արաբանական և միջոցառումների ալլան, հետաբագնագանության միջոցառումների ալլան, աստաբանականության միջոցառումների ալլան, աստաբանական և մի տեսինիալանն անփորիավին, > ՀՍՍԱԳ-ի բոլոր փաստաթղթերի իայերեն թղթային տարբերակները իասանելի են Սիսիան և Քաջարան համակելների վարչական շենքերում և Երևանի ձատապարիային դեպերասանեսում. > Ոչ տերեմիկական ասփոփագրի և Հահատումերի ներգրական պլանի ոսյերեն տարբերակները իասանելի են Իշխանասար, Աղիուո, Աղրավան, Վալատին, Որումասակա, Դարբաս, Գետաթադ, Գետաթադ, Լոր, Շենաթադ, Գեպեսի Վալատին, Դարտնավան, Դարբաս, Գետաթադ, Վետաթադ, Լոր, Շենաթադ, Գեպեսին Արատական միավումիների կաշական շենջեցում. > ՇՍՍԱԳ-ի իրապրապական 4-ամայա ժամակետն օգտագործվում է ՇՍՍԱԳ-ի արդյումբենը ձեզ ներկայացնելը, ձեր հետ իրորորակցնելը, Հշրջակա Միջավայրի փոս և արդյումբենը ձեզ ներկայացնելը, ձեր հետ իրորորակցված, շրջակա Միջավայրի փոս և արդյումբենը անել աշեն հանաժատան և Հահանագիր 1-ը, միջանի այլ խոսթերյալ կարելի և Երկայացնելը Արատաբերի 1-ը միջանի արդահացին և Հահագիոն իրև Արատաբերի 1-ը միջանի այլ խոսթերի Արատաբերի 1-ը միջանի այլ ծրակի ընագրերի 1-ը միջանի ույլ իները Տորագիր որ ցիկիլ ընթացքում ճանապարհային դեպարտանետի և շահագրեր Արումերի միջև կպահայանանն հաղորդակցնեն ուղիները Հորումերի միջև կպահայանեն հաղորդակցնեն ուղիները Արատաբերի հայասական հարորդակցնեն ուղիները Արատաբերի հայասիային հաղորդակցնեն ուղիները Հորումերի միջև կավանականի հետաբերի 1-ը միջանի ույիները Հորումերի միջև կավարական հարորդականին ուղիները Հորումերի միջև հարորդական հարորդականան ուղիները Հորումերի միջև հարորդականական հարորդական հարորդականան ուղիները Հորումերի միջև հարորդականական հարորդականական հարորդական Հորումերի միջև Հորումերի Հորումերի Հորումերի Հորումերի Հորումերի Հորումերի միջանական հարորդական Հորումերի Հորումերի Հորումերի Հորումերի Հորումերի Հորումերի Հայասի Հորումերի Հորումերի Հորումերի Հորումերի Հորումերի Հորումեր

Շնորհակալություն ուշադրության համար







#### **Biodiversity**

















































































Usignghnus և harage pulph

> 60004 փաթերը Արատում է մի բանի փատաաթղթեր՝ 20004 հաշվետվություն, 
Plassanhaudududu և unghaududu կառավարման այսն, Մառահայանական և 
աղիապանան փորգարումների կառավարման կառավարման այսն, Մառահայանական և 
աղիապանան փորգարումների կառավարման կառավարման բորգարումների կառավարման 
ստիարական փորգարումների կառավարմական բորգական և Ոչ տերերիականը 

> 60004 ի բորդ փաստաթղթերի հանիժեն թղուցել և օրբերականը խոսանելի են 
Սիտնաև և հայապան հուտեցներին պայան արագրական շենքերում և Երևանի 
ճանապարհային դեպարասաննառում,

> Ոչ դեփերինյական ամիախոսացին և Հանատուների ենքեցրումնեն չպանի հանիժեն 
տուրբեռականը հայանին և Իշիանասագ, Արիտու, Նորավան, Կայարորի, 
Որտունական, Դաբագա, Ծառայաս, Յետբերում, Լորտենական, Կարարուին, 
Որտունական դարարութանեն և համագահանայա, Լոր, ծենաթաց, Ֆիր և և եռեւանոր 
փորականը ի հրապարականեն «Արախա Արևերում», Երահայանի և և և և 
արարականը ներ կերկաացնելու, հեր Ինտ խորժողակերի , բրանա «Իրավարի կարարի 
արդականընց ինել ենրկա 2003 կանահարանն և Մետեսանորի 
հավալայացներ, համատ Հիր ենկագան ժամանակ 
արարումերը և և և ինչին 2003 կայականի դեպարումերը և 
արարումերը և Արահարանին արարումերը 
կարվեր է ենրկայանց գանկայան ժամանակ 
հուրերի միջև կաստականին խաղորդակցման ուղիները 
Շևորիակալություն ուշադրության համաս







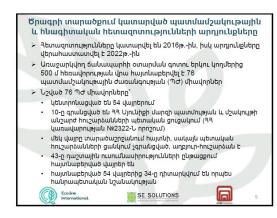
#### Cultural heritage

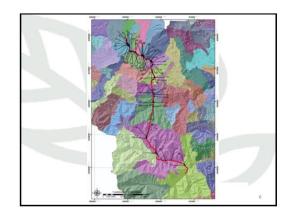




































Ծրագրի տարածքում կատարված պատմամշակութային և հնագիտական հետազոտությունների արդյունքները

Ծրագրի իրականացման արդյունքում որպես ազդակիր (գտնվում են ճանապարհի և դրա բաղադրիչների օտարման գոտում) նույնականացվել են 46 պատմամշակութային ժառանգության վայրեր (68 միավոր), այդ թվում՝

- 26 վայրը (47 միավորը) հնագիտական հուշարձաններ են,
- 5 վայրը (6 միավորը) պատմաճարտարապետական և հոգևոր հուշարձաններ են,
- 6 վայրը (6 միավորը) երկրաբանական hnւշարձաններ են,
- 9 վայրը (9 միավորը) բնական հուշարձաններ են։







#### Մշակութային ժառանգության կառավարման պյան

- Շին. աշխատանքներին ներգրավել պատմամշակութային ժառանգության (ՊԺ) փորձագետի, որը կիրականացնի հսկողություն բոլոր շին. հրապարակների համար, ինչպես նաև կօգնի իրականացնել բոլոր մեղմա-
- Տանագարիային դեպարտամենրի և ԿԳՄՍ նախարարության աջակցությամբ, համակարգել հայտնաբերված ՊԺ վայրերի գրանցման աշխատանքները,
- ՊԺ միավորների տեղափոխման դեպքում պատրաստել տեղափոխման գործողությունների առանձին ծրագիր (նախագիծ), համաձայնեցնել հիմնական շահագրգիռ կողմերի հետ։ Իրականացնել մասնագիտացված կապալառուի կողմից,
- Ընտրել շինարարական ճամբարների, շին.տեխնիկայի կայանման հանույթի տեղադրման վայրերի, մուտքի ճանապարհների և այլնի համար դեռևս չորոշված տարածքները խորհրդակցելով ՊԺ փորձագետի հետ և օգտագործելով ՇՄԱԳ-ի շրջանակներում արված առաջարկությունները,
- Շինարարական աշխատանքներից առաջ մշակել Երագրի համար Պատահական գտածոների ընթացակարգ։









<mark>Ծրագրի տարածքում առավել զգայո</mark>ւն պատմամշակութային վայրերը՝ հուշարձանները

- 1) կմ 2.5+50 կմ 3.7+50, Քարաբերդ ամրոցի հարևանությամբ գտնվող բևակատեղին և դամբարանադաշտը, (Միսիան, միավորներ 3-15),
- կվ 13.2+40 կվ 13.5+50, Որոտան (Որոտն) միջնադարյան գյուղատեղին և գերեզմանոցը, բրոնզ-երկաթեդարյան դամբարանադաշտը (Որոտան, միավոր 47-49),
   կվ 17.6+90, Մատուռի (եկեղեցու) ավերակներ, գերեզմանոց և խաչքարեր (Դարբաս բնակավայր, միավորներ 52-53),
- 4) կմ 26.9+20, «Սագու ղալա» ամրոցի մնացորդներ (Շենաթաղ, միավոր
- 5) կմ 36.1+40, Փաստագրված միջնադարյան գյուղատեղիի մնացորդներ (Չեղի բնակավայրի Քիրս տեղամաս, միավոր 66),
- 6) կմ 36.3+00, Եկեղեցի (Գեղի բնակավայր, Քիրս գյուղի տարածք միավոր 67):
- 7) կմ 53.1+80, Լեռնաձոր-1 քարայր-կացարանը (Լեռնաձոր բնակավայրի Կավճուտ տեղամաս, միավոր 75)։







**Երագրի տարածքում առավել զգայուն պատմամշա** կութային վայրերի վրա ազդեցության մեղմացումներ

կմ 2.5+50 - կմ 3.7+50, **Ք**արաբերդ ամրոցի հարևանու-թյամբ գտնվող բնակատեղին և դամբարանադաշտը



<u>Մեղմացնող</u> <u>միջոցառումներ</u>

<u>սիտուսարումներ</u>
1. Իրականալնել
ստուգորական
ստուգորական
ստուգորական
ստուգորական
ստուգորական
ստուգորական
ձորաին
3. Դիրարսիկ արոյոջ
սասիկոր կառուցվանքի փոփոխությունը
կարող է բացարարան
են կանան
ստրեցությունը
4. Եթե ոչ, նույկանական
սպիցությունը
սպուհացնական
պերուսաների մաներեսը և
ծավար պեղումների մակէ ծավալը։ 5. Իրականացնել պահպանականն պեղումներ

SE SOLUTIONS



Ծրագրի տարածքում առավել զգայուն պատմամշակութային վայրերի վրա ազդեցության մեղմացումներ

կմ 13.2+40 - կմ 13.5+50, Որոտան (Որոտն) միջնադարյան գյուղատեղին և գերեզմանոցը, բրոնզ-երկաթեդարյան







Միջոցառուններ

1. Ավարուել դաշոային 
աջիատանքներ՝ 
«ասանաջարերի քանակը 
հետանաջարերի քանակը 
հետանաջարերի քանակը 
հետանաջարերի անակա 
հետանարել 
հետանարել 
հարարել 
հարարել

**Ծրագրի տարածքում առավել զգայուն պատմամշա**կութային վայրերի վրա ազդեցության մեղմացումներ



<u>Մեղմացնող</u> միջոցառումներ միջոցառումներ
1. Փոփոխել
պատվարի
կառուցվածքը
2. Եթե Ինսարավոր չէ
փոփոխել, ապա
պախոխել
պահպանական
պերումերի
իշագրումը
3. Պեղել ամբողջ
փայրը և տեղափոխել
շուջակա տարածքներ.





























