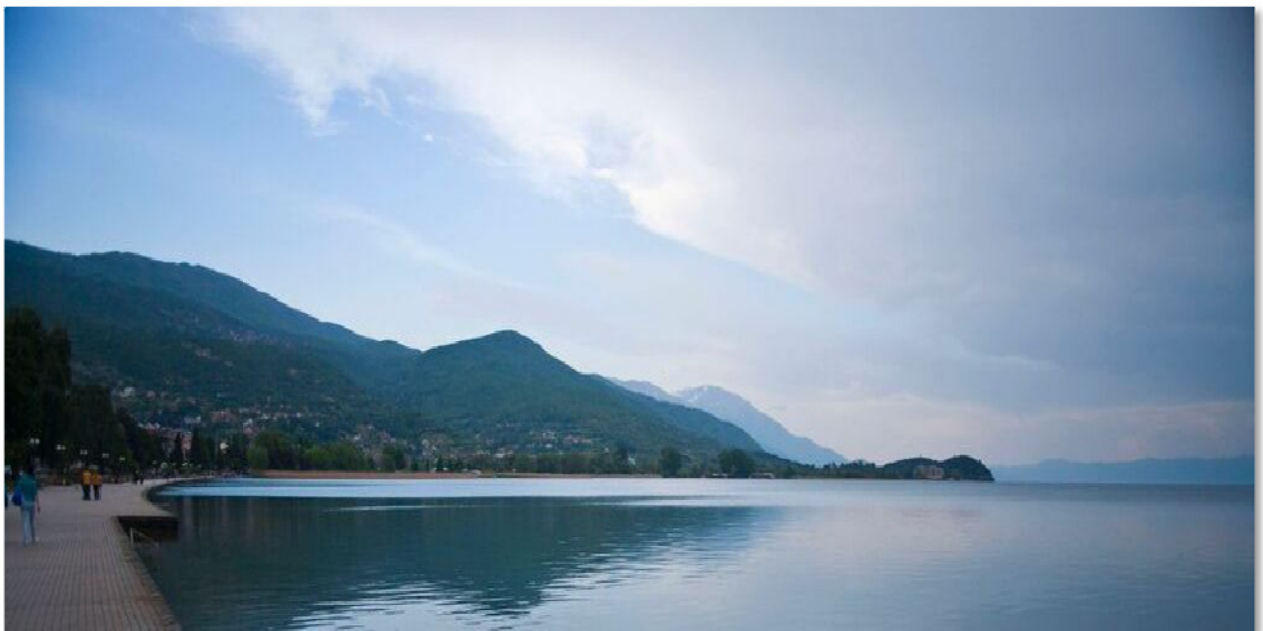


Heritage Impact Assessment

The potential impact of the Expressway Ohrid – Peshtani on the Outstanding Universal Value of the World Heritage Property of the Ohrid Region



Ohrid, June 2015

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Executive summary

Introduction

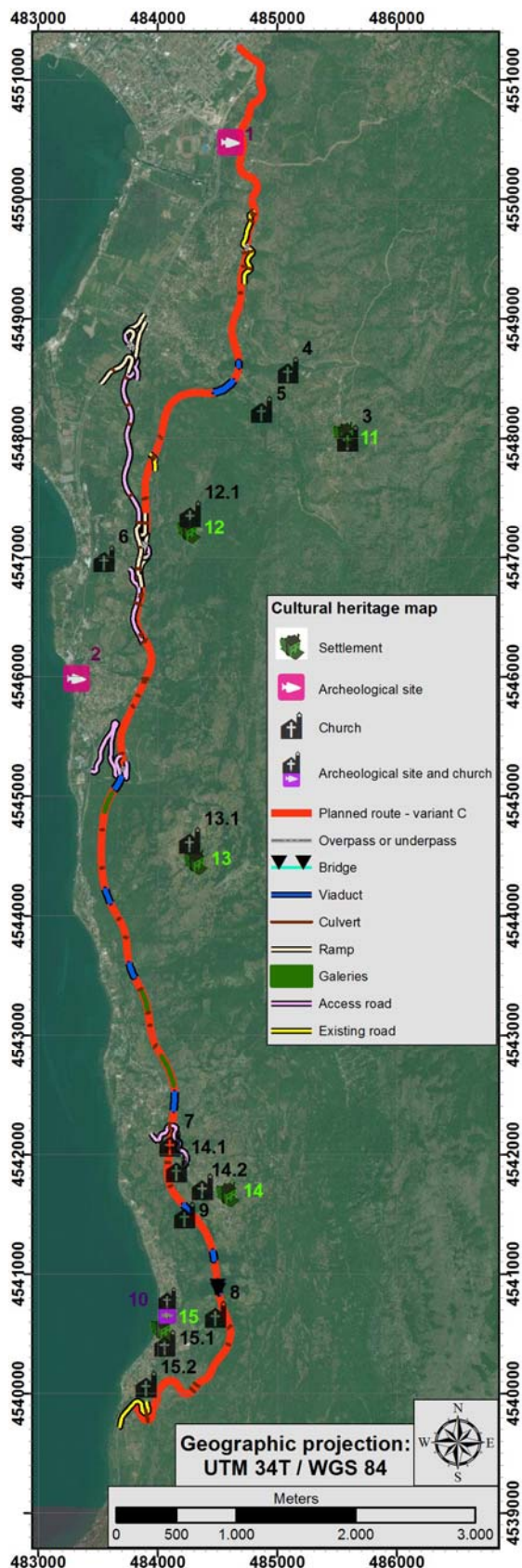
This assessment has been conducted as a result of the implementation of the project for the construction of the Expressway Ohrid-Peshtani. Specifically, this has been done due to the need for determining the impact that the newly built expressway will have on the social, cultural and natural values of the region. Given the fact that the cultural and natural heritage are an important factor for registering the Ohrid region as a World Heritage Site according to UNESCO, all possible impacts (positive and negative) should be approached with special care. Accordingly, this report is aimed at anticipating and registering such impacts on cultural heritage. The planned expressway is going to be constructed within the boundaries of the protected area by UNESCO.

Positive impacts from the construction of the road will be multidimensional. It should be noted that primarily the intra- and inter-regional communication of the area will be increased. Also important is the improvement of the trans-boundary cooperation between Albania and Macedonia. The sustainable use of all resources located in the region of the protected area would be imperative.

Heritage Impact Assessment

Integrated management of natural and cultural heritage is carried out according to national legislation, determined and defined strategic documents, analyzes and reports, as well as bibliographic units related to the heritage of the Ohrid region. While preparing the Heritage Impact Assessment (HIA) they are all taken into account, as well as other published and unpublished data sources, which refer to the heritage of the region and its management. Besides the cabinet work for preparing the Heritage Impact Assessment (HIA), the research team approached to field studies with the aim to gather relevant and current data, as well as mapping and visualization of affected cultural sites and objects.

As a general basis for the development of HIA, the ICOMOS guidelines model were taken on which such reports should be based. The Impact Assessment Methodology is comprised of grading and evaluation of *receptors' sensitivities* (significance of the site/value/locality), as well as grading and evaluation of *impact magnitudes* related to the construction of the expressway. The diverse grading of the values and impacts are expressed through determined *criteria descriptors* ranging from negligible to very high for receptors, or from no change to major for impacts. The determined categories of grading and assessment were subject to intercrossing, thus defining the *impact significance* of each of the reviewed sites or values and the impacts on them. Defining these variables is required with the aim for determining the endangerment of the Outstanding Universal Value (OUV) of the region with the planned construction of the route. Assessment relates primarily to cultural heritage (tangible and intangible) not excluding its unbreakable bond with the natural surroundings



1 View the route and locations of archaeological sites, cultural heritage and settlements

Conclusions

The Heritage Impact Assessment covers two periods as follows: period during construction (3 years) and period of using the road. After the detailed analysis of the exact stretching of the planned route the conclusion was that there is no significant cultural heritage that is closer than 50 meters from the planned route. This means that their properties would not be endangered or damaged during the construction of the route. Therefore the HIA generally refers to the period during the use of the road. The Assessment also determined whether the *integrity* and *authenticity* of the heritage is endangered. Both, the integrity and authenticity of the region incorporate all the important cultural and natural goods and their combination (Cultural landscape) into an unbreakable whole. With the construction of the route more positive effects will be caused, like the dispersing of the crowds during the summer season, for example. Regarding this, the authenticity and integrity of the region will be more protected than threatened. This in turn will not have an impact on the endangerment of OUV of the region. The overall pressure on the cultural heritage is negligible to minor from which it can be concluded that the project will have prevailing positive impacts on the region.

The more significant effects and problems are subject to removal and elimination within the HIA through numerous mitigation and other measures for improvement. Therefore, several measures are proposed for promoting social and health-care services between Ohrid and the settlements along the route, while the improved functional connectivity is a factor of increased regional integrity. On the other hand, negative impacts emerge as disrupted panoramic views and noise caused by the proximity of the route to certain cultural monuments in the region. For their elimination series of mitigation measures

are proposed which include actions for prevention and reduction by placing different visual and sound barriers along the route. Over time, these effects will decrease while the benefits for the local population, as well as the region and Macedonia in general, will increase. Furthermore revitalization and development of rural settlements will be encouraged; traffic pressure will be reduced, while maximizing economic benefits

1. Introduction

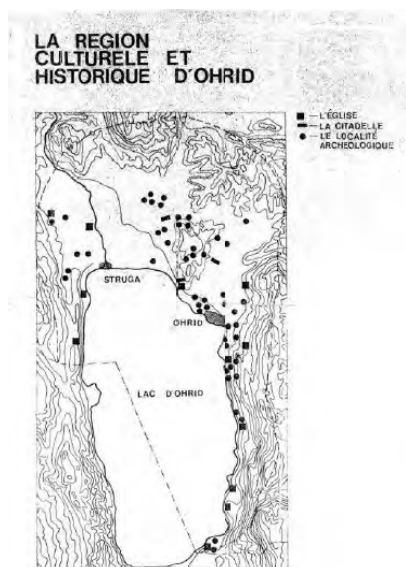
1.1 Background to this assessment

This Heritage Impact Assessment aims at objectively assessing the impacts of the planned Expressway Ohrid – Peshtani. This project is implemented by the Public Enterprise for State Roads which under the competences of the Law on state roads is authorized for construction, reconstruction, rehabilitation and maintenance of state the roads. The project will be carried out on the territory of Ohrid Municipality, and will require conversion of state land and expropriation of private land. The alignment of the Expressway will pass through UNESCO protected area Natural and Cultural Heritage of Ohrid Region and Biosphere reserve and through National Park Galichica.

In accordance with the national regulation a draft Environmental and Social Impact Assessment(ESIA) was prepared, along with appropriate assessment of impacts on biodiversity and cultural and natural heritage in the region, which are set according to EC Guidelines and the United Nations Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO).



2 Document of the UNESCO Convention for Ohrid Region, September 8, 1980



3 Old Ohrid Region UNESCO borders

1.2 The World Heritage property of the city of Ohrid and Ohrid Lake

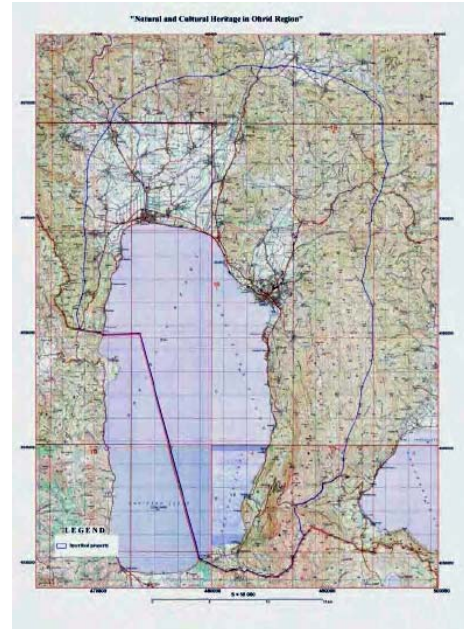
With the Decision 3COM XII.46 in 1979 the Committee inscribed the Ohrid Lake in World Heritage List under natural criteria (iii). In 1980 with Decision 04COM V.13, the protected area was extended to protect cultural and historic area of Ohrid region. A joint UNESCO-ICOMOS-IUCN monitoring mission in 1998 defined and proposed minor boundary modification of the property. In 2009 the World Heritage Committee encouraged Macedonia and Albania to cooperate toward the preparation of a new trans-boundary extension of the property to include the Albanian part of Lake Ohrid and its watershed, in order to strengthen the values and integrity of the property. It considered that the trans-boundary nomination should be for a mixed property and urged for the consideration of the cultural aspects of the Albanian

lakeshore (Decision 33 COM 8B.40).The Natural and Cultural Heritage of the Ohrid region was inscribed in World Heritage List as a mixed Natural and Cultural Heritage of Ohrid region with cultural, historical and natural values under criteria (i), (iii), (iv) и (vii), with a total area of 833,5 km²

1.3 Expressway Ohrid – Peshtani

The Project includes a construction of a new Expressway A3 Kosel (connection with A3) – Ohrid – the border with the Republic of Albania (border crossing Ljubanishta), the section Ohrid – Peshtani with a length of 13,32 km (from km 8+561,16 to km 21+882,44).

A wider area where the Expressway is planned is the protected area of Ohrid Heritage Site under UNESCO. The designed route of the Expressway along the entire length passes through the National Park Galichica, through the western slopes of Galichica Mountain at an altitude of 750-800 m. The route is stretching in north-south direction on altitude of 50-10 m above the Ohrid Lake. Westwards, between the Lake and the road there are urban zones of the villages Racha, Shipokno and Dolno Konjsko and the tourist settlements Sv.Stefan, Lagadin, Peshtani and Eleshec. On the east side of the route there are the villages of Velestovo, Gorno Konjsko and Elshani.



4 New UNESCO Ohrid Region borders

1.4 Background of project

Activities for preparation of the technical documentation for the road communication Kosel-Ohrid-border St. Naum started back in the years 1978-1980. In accordance with the Terms of Reference number 08-2517/1 from 24.08.1978 prepared by the Fund for National and Regional Roads for the road section Kosel-Ohrid-St.Naum, the project documentation has been made at the level of preliminary designs, by examining more variant and sub-variant solutions.

Based on this documentation through specific project assignments major projects were implemented for more segments of the existing road:

- Section Biljanini Izvori-Gorica-St. Stephen as a highway solution;
- Gorica-Hotel Metropol with bypassing hotel facilities located next to the lake;
- Bypassing the weekend-settlement Istok (Dolno Konjsko), main project Racha-Metropol, which implementation has started but has not been completely finished;
- Section Ljubanishta to the border with the Republic Albania and the border crossing St. Naum that are fully realized and put into operation in 1993.

Subject of the Heritage Impact Assessment (HIA) Report is the selected option C of the Expressway Ohrid-Peshtani which entire length passes in the protected area of world heritage property of the Ohrid region and more specifically in the area of National Park (NP) Galichica.

The Ohrid region as a World Heritage Site is subject to special protection regime. Republic of Macedonia as a cosignatory of the Convention Concerning the Protection of the World Cultural and Natural Heritage is obliged within its authority to take into account the developmental issues as well

as their impact on the natural and cultural world heritage listed by UNESCO. Furthermore it should be noted that the protection of the cultural heritage should not automatically imply decadence of the urban development of regions. On the contrary, culture should be the main factor for widening the opportunities for further development of the region.

The report's aim is to demonstrate how the Expressway Ohrid-Peshtani affects the cultural and natural heritage. Although along the route there is no direct physical endangerment of any recorded cultural monument (Report of the National Institute - *Institute and Museum of Ohrid* - NI Institute and Museum - Ohrid No. 13-1280 / 2 of 01.11.2012), however the construction of the road has indirect impacts, both on the material as well as on the immaterial cultural heritage of the region. This report was also requested in the UNESCO's Report from December 2013 - *Report on the mission of the world heritage property "Natural and cultural heritage of the Ohrid Region", the former Yugoslav Republic of Macedonia, 11 to 13 December 2013* (p. 15).

In accordance with the protective-conservation bases (No. 13-573/3 since 29.04.2010), provided by the NI Institute and Museum – Ohrid, for the needs of the Spatial Plan of NP Galichica , in which the Expressway route matches, certain protection-conservational measures are suggested- both general and specific.

General protection measures:

Defining the protection regime of the region encompasses direct protection in a way which will preserve its authentic, traditional, urban, architectural, artistic and aesthetic values and will enable appropriate allocation of the region's property in order to use and introduce novelties which will suit the contemporary necessities of commerce, tourism, culture etc.

Any adjustments to the already existing and newly-planned buildings in the region (which have monumental status) must be approved by the authority responsible for conservation of the cultural heritage which must act in accordance with the Law on Protection of Cultural Heritage.

The archaeological sites in the vicinity of the planned route require the presence of experts from the services for the protection and conservation of cultural as well as a permit (acquired beforehand) which will enable the start of infrastructural and similar changes in the region.

If, eventually, new sites are located, archaeological excavations are to be performed and if needed immediate preservation and presentation of the archaeological findings are to be conducted.

All alterations of the region's property are evaluated in accordance with the defined re-evaluation and categorization of the objects and sites and they are monitored by the respective conservation institute.

The region is subject to a three-level protection system.

1.5 Common goal of the expressway

The Expressway project is in accordance with the legal obligations and regulations which concern the protection of the region's natural and cultural heritage. Moreover, it does comply with the current necessities of the area's population. The goal of the project is to enhance the social and economic progress which will not be damaging to the sustainable use of the different types of resources (natural and anthropogenic) and their conservation for the future generations. Due to the intricate nature of the level of conservation in terms of the natural and cultural heritage and their importance, the strategic aim of the project is a multi-dimensional process which takes into account the different opinions in order to enhance the regional and cross-border relations and connections.

Accordingly, the route will undoubtedly largely increase the contactability, connectivity and transitivity of the region. The connection with the Pan-European Corridor VIII will enable the connection of the traffic systems with Southeast Europe. This will contribute to an increase flow of merchandise and passengers intra- and inter-regionally. The sustainable utilization of the World Natural and Cultural Heritage of the Ohrid region requires economic valorization of the area by developing sustainable selective tourism types. The constructed route will provide the tourists with easier and faster access to the region and its localities and facilities. It will also allow for an improved connectivity with the neighboring regions. The connection between the tourists and service providers in Albania and Macedonia will improve. This is of great importance, given the fact that the region has transnational character.

This project will allow for numerous long-term benefits for the population of the region, and the republic in general.

2. Summary of policy context



Fig 5 Management Plan / natural and the cultural heritage of the Ohrid Region / World Cultural Heritage / draft version

In the national legislation of the Republic of Macedonia no planning document for integrated management of natural and cultural heritage is provided.

Under the **Law on Protection of Cultural Heritage** ("Official Gazette of the Republic of Macedonia " no. 20/04; 115/07; 18/11; 148/11; 23/13; 137/13; 164/13; 38/14; 44/14 и 199/14,Article 49-a), related to management of monumental units and cultural landscapes for which an Act for protection has been enacted. Adopting a Management Plan for immovable cultural heritage has also been envisaged, in which the entity responsible for managing the cultural goods plans the measures and activities for protection of cultural heritage.

In the **Law on management of natural and cultural heritage of the Ohrid region** ("Official Gazette of the Republic of Macedonia" no. 75/2010, Article 13) the adoption of a Management Plan for the World Natural and

Cultural Heritage in the Ohrid region is envisaged with an Action Plan for the period of nine years. The aim is to provide specific conditions for permanent conservation of monumental whole and removing the causes that threaten its values. The goal is also coordinated implementation of joint initiatives, actions or projects for protection, editing, use and revitalization of the monumental whole - *Old urban core* of Ohrid. The law provides planning of the management, content and the procedure for the adoption and implementation of the Management Plan for the World Natural and Cultural Heritage in the Ohrid region.

The ***Law on declaring the old urban core of Ohrid as cultural heritage of particular importance*** ("Official Gazette of RM"no.47/2011) explains the old urban core of the city of Ohrid which as a cultural heritage is of particular importance and represents a commodity of public interest for the Republic of Macedonia, as such it enjoys special protection according to this law. Because the old part of the town directly is not included along the planned route, this law will have an indirect impact on this project.

While preparing the HIA data were used that were contained in national strategic documents, analyzes, reports, information as well as relevant bibliographic units for the natural and cultural heritage of the Ohrid region.

The area in which the project will be implemented is covered by:

- Spatial plan of the Ohrid – Prespa region 2005-2020
- Spatial plan of the National Park Galichica 2010-2020.

Conducting the HIA incorporated data from sources such as national strategic documents, analyses, reports, as well as bibliographic units about the natural and cultural heritage of the Ohrid region. The general regulations regarding the alterations in the protected area are given below.

Conserving the cultural heritage:

Conserving the urban structure means: population density connected to monitored interpolation of new locations in free areas, boundaries of urban agglomeration as part of organic urbanism, street web, penetrations towards the lake and all green areas.

Conservation of certain buildings: monuments are kept authentic by conservation and repairing. A facsimile reconstruction is suggested when dealing with monuments that are heavily damaged and repairing is not possible. These interventions should be in accordance with the appointed protection regime.

Retrieval of lost buildings:

Buildings that don't exist anymore and the locations are free, for which there exist: old urban plans, remaining parts of the buildings, technical and photo documentation, should be reconstructed, revitalized or typologically renewed.

If there is enough information about the authentic look of the decaying buildings they should be reconstructed.

After reconstructing functional buildings for which conservation measures cannot be applied, recomposing of the real estate is mandatory during the reconstruction or typological renewal.

Locations:

The buildings should be within the limits of their architectural plan. However, small adjustments which will not drastically change the ambient are allowed.

Every newly given location or thorough reconstruction, given the huge concentration of archaeological sites, must be conditioned with a prior archaeological research, if they have not previously been made

Site plans:

The size of the site plans in the region and especially in the existing rural areas cannot be measured by contemporary standards (Law on Spatial and Urban Planning).

The already existing site plans should be preserved with attention to landscaping.

Specific attention should be given to the size of the site plans regarding the closing of the lines of sight.

It is mandatory to keep the original construction and regulatory requirements of the buildings.

Heights:

Buildings that are protected goods don't undergo changes of their heights.

The height of the projected buildings should not threaten the lines of sight.

Function of the buildings:

The assigned function of the buildings should be kept with the possibility for planned re-assignment and introducing new functions and contents if needed, monitored by the respective protection body.

The hotel-catering facilities (restaurants, bars, nightclubs etc.) should have controlled working-hours, specific delivery time and garbage disposal.

The free areas in the region can provide additional contents and offer, such as viewpoints, theatrical seating arrangements.

The green areas should maximally be protected and horticulturally enhanced and nurtured regularly.

Traffic:

Parking in the vicinity of monuments is not allowed.

The pedestrian streets have mixed properties such as: they are paved, mostly with partially granite cobbles, refined tufa rocks and granite slabs (polished and unpolished). Asphalt is put on the streets where there is frequent motorized traffic.

The eventual change of materials should be monitored by the department for cultural monument conservation.

Adequate and unified road signs leading to protected objects should be placed.

Urban equipment:

The urban equipment should be dealt with a special project which will include all necessary elements (street lightning, garbage bins-containers, drinking-water fountains, billboards etc.)

Services:

Public sanitary knots put in a number of locations which are built in the drop of the terrain are essential.

Service stations are necessary such as: posts, pharmacies, tourist-information points etc. which can be set in adapted and existing buildings.

Infrastructure:

Electrical and phone lines should be hid underground (especially power boxes in which centrals are placed).

The water supply network and the sewage system should be conducted according to all standards and regulation given the fact that many buildings are not connected to a sewage system and use non-compliant septic holes.

Adoption and execution of proper fire prevention measures regarding the narrow streets and the streets with specific urban agglomeration.

Lawful design, supervision and construction:

The lawful design, supervision and construction is defined with the Right to design, monitor and construct defined in the Regulations on conservation projects („Official Gazette of the Republic of Macedonia” No. 44/06 since the 05.04.2006 and the Law on Construction („Official Gazette of the Republic of Macedonia” No. 51/05 since the 30.06.2005).

Specific measures:

The specific measures for protection envisaged in the Regulations on the preparation of protection and conservation bases („Official Gazette of the Republic of Macedonia” 19.12.2005) Article 10, paragraph 1, point 5 constitute of conservational, legal, administrative and other preventive and corrective measures such as

- archaeological monitoring;
- protective archaeological investigation;
- documenting;
- designing specific studies—elaborates, programs and urban planning activities;
- preparatory measures in case of armed conflict or natural disasters and so on.

The excavation processes need to be officially monitored by the respective institute for cultural heritage protection.

After the finished archaeological excavations, if necessary, an immediate conservation and presentation are needed.

Usage, presentation and popularization of the region:

This region, in spite of being exposed to centuries of change, serves as an unbreakable connection between the past and the present, the worldly and the sacred, the mythological and the realistic. All those changes that endanger this balance should be softened by the recommendations of the protection and conservation regime.

In doing so, the old crafts can be renewed, new local tourist-information centers can be created that offer copies of the moving cultural heritage as souvenirs, cultural events can be enriched; tour guide service can be licensed, as well as art collections can be enlarged.

Despite the relatively successful popularization of the region's resources, advancing the field of cultural tourism and presentation of the region itself should be one of the main goals.

Management of the region and its risks:

There are a number of institutes which deal with the management of the urban region: the Ministry of Culture, the Ministry of Transport and Connections as well as religious institutions such as the Macedonian Orthodox Church- the diocese of the Debar-Kichevo region and the Muslim Religious Community.

This complexity in the management with the goods is always followed by the risk of conflict of interests or clash of needs between the owners, managers and consumers which can result in the total loss of authenticity along the full length of this route or its individual parts.

Accessibility of the region:

This region is situated on transit and tourist-frequent roads which means that visitors often choose the region as the end destination through the national roads in two directions: Skopje-Bitola-Ohrid or Skopje-Kichevo-Ohrid. Moreover, with the newly planned Expressway Ohrid-Peshtani which is a part of a strategic connection to the Republic of Albania via Corridor VIII over the border-crossings Kjafasan and St.Naum.

Integrated protection, monitoring of conservation:

Integrated protection of the region actually is the basis for future management of the region which borders should include the part on the Albanian side as well as continuing conservation monitoring during planning and implementation of the action plan.

3. Applied methodology for the preparation of HIA

3.1 Data sources

3.1.1 Published data

Official UNESCO documents:

- Report of the 3rd Session of the Committee – 1979;
- 03COM XII.46 - Consideration of Nominations to the World Heritage List – 1979;
- Report of the 4th Session of the Committee – 1980;
- 04COM V.12 - Consideration of Item 4 of the agenda: Nominations the World Heritage List (inscribed sites) – 1980;
- 04COM V.13 - Consideration of Item 4 of the agenda: Nominations the World Heritage List – 1980;
- 10BUR IX.27 - Requests for technical co-operation – 1986;
- 10COM XI.33 - Requests for International Assistance – 1986;
- State of Conservation Report: 1998 – 1998;
- SOC Report1998 – 1998;
- 22COM VII.30 - Reports on the State of Conservation of Mixed Properties Noted by the Committee – 1998;
- (Cycle 1) Section II Summary – 2006;
- 30COM 8B.9 - Changes to Names of Properties (Natural and Cultural Heritage of the Ohrid Region) – 2006;
- Natural and Cultural Heritage of the Ohrid region - inscribed property – 2009;
- 33COM 8B.40 - Mixed properties - Examination of minor boundary modifications - Natural and Cultural Heritage of the Ohrid Region (Former Yugoslav Republic of Macedonia) – 2009;
- Lake Ohrid Scoping Mission Report – 2012;
- Report on the Advisory Mission to the World Heritage property “Natural and Cultural Heritage of the Ohrid region”, the former Yugoslav Republic of Macedonia, from 11 to 13 December 2013 – 2013;
- State of conservation report by the State Party / Rapport de l'Etat partie sur l'état de conservation – 2014;
- SOC Report2014 – 2014;
- 38COM 7B.58 - Natural and Cultural Heritage of the Ohrid region (the Former Yugoslav Republic of Macedonia) (C/N 99ter) – 2014;
- (Cycle 2) Section II - 2014.

As remaining documents that underpin this project, and are within the Republic of Macedonia are the following:

- Archeological map of the Republic of Macedonia, 2002, Macedonian Academy on Sciences and Arts - MANU;
- Macedonia: L'Arte Medievale dal IX al XV Secolo – 2006, Milan, Jaca book, Korunovski S., Dimitrova E.;
- Climate changes and cultural heritage - Institute for Heritage Management – IHM, Michael Schmitt and Britta Rudolf, 2013;
- Management Plan for the National Park Galichica for the period 2010-2020, Edition 1-4 – NPG, February 2011;
- Four historical cities of Western Balkans – Values and challenges – EVAH – European Values in Heritage, Stephan Dempke, Anduela Lulo (Caca) and Sadi Petrela, 2012;
- Study on the tourist potentials of the South-west Planning Region – November 2013, Center for development of SWPR;
- Cave churches on the shores of the Ohrid Lake - 1999, G. Angelichin - Zhura;
- Old Christian Monuments of the Ohrid Region –1975, V. Bitrakova – Grozdanova;
- Ohrid wall paintings in the XIV century – 1980, C. Grozdanov ;
- Macedonia – Millennial Cultural – Historical facts – 2013, Media Print Macedonia, University EURO-BALKAN, Ministry of Culture.
- Cultural Heritage – 2008, S. Korunovski , Faculty of Tourism and Hospitality - Ohrid
- Macedonian house – Mislá, Grabrijan Dushan, 1986;
- Old urban architecture in Ohrid – Makedonska kniga, Chipan Boris, 1982.

3.1.2 Unpublished

- Management Plan for the natural and cultural heritage of the Ohrid region – Ministry of Culture of the Republic of Macedonia and Ministry of Environment of the Republic of Macedonia, 2014;
- Report from the field surveys of the villages in the Ohrid region No. 11-678/2 – National Institution – Institute for Protection of the Monuments of Culture and Museum – Ohrid, June 2014;
- Sub-strategy for traditions and events in the Republic of Macedonia – Agency for Support and Promotion of Tourism, 2014;
- Plan for integrated management of the old urban core of Ohrid – Municipality of Ohrid, 2014.

3.2 Data bases

- Study on Environmental and Social Impact Assessment for the Project Construction of a new Expressway A3 Kosel (connection with A3) – Ohrid – The Border With The Republic of Albania (border crossing Ljubanishta), the section Ohrid – Peshtani - Public Enterprise for State Roads, Chakar & Partners

- Protection-conservational bases for the spatial plan of the Ohrid-Prespa region, Institute and Museum – Ohrid;
- Registry of material and spiritual heritage- Ministry of Culture of the Republic of Macedonia.

3.3 Field surveys

In order to analyze the stretching of the route and its correlation with the registered, but also the recorded archaeological sites and buildings, several field surveys have been conducted along the route, such as:

Data	Members of team	Realized goals
14.05 2015	Representatives of all departments of ESIA	- Initial overview of the route and detecting possible critical points - Consideration of inter-relations between natural and cultural heritage and settlements
19.05 2015	Members of HIA and Visualization Expert	- Boat trip from Ohrid to St. Naum, in order to perform visual identification of the route - Preparation of photo – documentation of the critical points - Visibility of the route from the lakeside during day and night conditions
20.05 2015	Members of HIA and Visualization Expert	- Visual identification of the expressway from the other side of the lake, in Albania from the locations of Lin and Pogradec
21.05 2015	Members of HIA and Visualization Expert	- Visual identification of the Expressway Ohrid – Peshtani from the city of Ohrid - Preparation of “sense of place” - photo – documentation - Visiting the relevant institutions related to the protection of cultural heritage
30 -31. 05 2015	Members of HIA	- Tour of all registered sites and buildings along and near the expressway - Visiting all places along the route - Taking photos from the route to the sites and from the sites to the route in order to determine the visual impact the expressway will have - GPS tracking and locating of all important points of the cultural heritage along the route and near it, - Verification of all the registered and recorded archeological sites along the route according to the archeological map of the Republic of Macedonia (archeological survey along the planned route), - Discussions and conversations with the local population.

3.4 Impact assessment methodology

Cultural heritage assessment

The assessment of the cultural heritage as part of the overall HIA for the Ohrid region strives to determine the potential impact of the planned construction of the Expressway Ohrid-Peshtani on certain receptors (cultural values of different types), as well as the impact on the overall OUV of

the region. This evaluation respects the principles of authenticity and integrity and it is an adapted version of the ICOMOS guidelines for HIA. The assessment included professional evaluation of the individual cultural localities and values, which are situated in the vicinity of the planned route and which might directly or indirectly be affected by its construction. More precisely, it is a graded assessment of the **receptor sensitivity** expressed by certain **criteria descriptors**. The sensitivity of the receptors has five levels (grading), starting with the lowest-negligible and ending with the highest-very high.

The explanation of the receptors` sensitivities, or each of the criteria descriptors is shown in the table below

Sensitivity	Typical Criteria Descriptors
Very high	Very high importance and rarity, international scale and very limited potential for substitution
High	High importance and rarity, national scale and limited potential for substitution
Medium	High or medium importance and rarity, regional scale, limited potential for substitution
Low	Low or medium importance and rarity, local scale
Negligible	Very low importance and rarity, local scale

Besides determining the receptor sensitivity, the impact significance was also analyzed. More precisely, the impact that the construction of the route will have on the receptors (its tangible and intangible elements). Therefore a complete inventory of the cultural heritage in the given area was the result, as well as a certain number of most important localities and resources, which were at high risk of being damaged to a lesser or greater extent, were selected. Additionally, included were those receptors and their impacts which are located in the vicinity of the route and have a minimum importance for the locals, or tourists as part of their cultural-tourist offer (visiting local church, celebrating local customs, celebrations, feasts and so on).

The **tangible element** of the receptors, or the impact on them, is called **buildings and fabric**. It concerns the form and design of the value, the material that it is made of, it takes into account whether it affects their substance, functionality and accessibility for the tourists, travellers, visitors or the local population, as well as the traditions and events connected with the buildings and localities along the route.

The **intangible element** of the receptors also called **context and setting** include the cultural landscape, intangible cultural heritage (songs, dances, sayings etc.) , as well as the feeling and the spirit, the essence of the locality or value. This concerns the balance of the value with the meaning of the surroundings (environment) and their meaning in terms of harmony, beauty and coherence. This also includes the visual adequacy of the value in the environment and vice versa. For example, the subject of assessment was determining the level of disturbance in the visual context, if the construction of the expressway will result in reduced visual harmony of the cultural value in the

environment, as well as the visual harmony of the environment (landscape) seen from the visited locality (value).

The tangible and intangible elements of the cultural valuables are determined according to the Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO July, 2013).

Buildings and fabric	form and design
	materials and substance
	function and accessibility
	tradition and events connected with buildings (churches) in settlements which are located along the expressway
Context and setting	cultural landscape
	intangible heritage
	spirit and feeling

As the before mentioned suggests, the impact can be evaluated in terms of the level of influence – **impact magnitude** on both aspects of the receptor (buildings and fabric – tangible aspect and context and setting – intangible aspect). The evaluation of the impact consisted of professional judgement by adequate experts in their respective fields. The level of magnitude varied from lowest-no change to highest-major.

The lowest level of magnitude signifies that there is no risk of an immediate or indirect negative impact on the resource and its parts or elements and in the future its value (individual or as part in the total value) will not be diminished. The same goes for the positive effects i.e. the mentioned construction will not contribute to the enhancement of the resource’s value (individual or as part of the total value). The highest grade of impact magnitude refers to the highest level of change that will occur on the cultural resource in a positive or negative sense. The two extremes can be: complete losing of the cultural value, or devastation and decay to the point of uselessness and irreversible damage; or on the other hand, complete structural restoration and quality enhancement.

The next table shows the different levels of magnitude and their description by criteria descriptors.

Magnitude	Typical Criteria Descriptors
Major	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (Adverse)
	Large scale or major improvement of resource; extensive restoration or enhancement, major improvement of attribute quality (Beneficial)
Moderate	Loss of resource, but not affecting integrity, partial loss of/damage to key characteristics, features or elements (Adverse)
	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (Beneficial)

Magnitude	Typical Criteria Descriptors
Minor	Some measurable change in attributes, quality or vulnerability, minor loss of or alteration to one (possibly more) key characteristics, features or elements (Adverse)
	Minor benefit to, or addition of, one (possibly more) key characteristics, features or elements, some beneficial impact on attribute or a reduced risk of a negative impact occurring (Beneficial)
Negligible	Very minor loss or detrimental alteration to one or more characteristics, features or elements (Adverse)
	Very minor benefit to or positive addition of one or more characteristics, features or elements (Beneficial)
No change	No loss or alteration of characteristics, features or elements, noobservable impact in either direction.

At the end of this process the two defined categories for the determined cultural values are inter-crossed. The two variables are *receptor sensitivity* and *impact magnitude*. The combination of these two elements of the assessment is called **assigning impact significance**. Because there are two aspects for the impacts, again we will have two values of the assessment. In the following table the results and states are shown that can be obtained with the interconnection (inter-crossing) of the two elements:

		Impact magnitude				
		No change	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

In the following table each of the categories are explained through the corresponding descriptors (Criteria Descriptors):

Significance category	Typical Criteria Descriptors
Very Large	Only adverse impacts are normally assigned this level of significance, and represents key factors in decision-making process. These impacts are generally but not exclusively associated with sites or features of International, National or Regional importance that are likely to suffer a most damaging impact and loss of integrity. A major change in a site or feature of local importance may also enter this category.
Large	These beneficial or adverse impacts are considered to be very important considerations. They are likely to be pertinent in the decision-making process.
Moderate	These beneficial or adverse impacts may be important, but are not likely to be key decision-making factors. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse impact on a particular resource or receptor.
Slight	These beneficial or adverse impacts may be raised as local factors. They are unlikely to be critical in the decision-making process, but are important in enhancing the subsequent design of the project.
Neutral	No impacts of those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

3.5 Scope of assessment

The main focus of the HIA report are the registered cultural monuments, however, the monuments which are not officially protected are not overlooked. In terms of the archaeology which is a frail group of cultural heritage the HIA team used all information about the registered and recorded archaeological findings that were the subject of the field research in order to determine and assess the possibility of finding archaeological remains along the length of this route. The risk of finding archaeological values accidentally deep underneath the surface that will be dug out during the construction remains. This remains under the Law on protection of cultural heritage in the case of unexpected findings.

The HIA includes two periods of estimation: the period during construction (3 years) and the period after putting the road to use. The precise investigation of the important cultural heritage proved that there are no significant cultural heritage values closer than 50 meters of the route, which will not threaten its characteristics during the construction of the road. Only two newly-built churches (St. Minas-Elshani and St. George-Peshtani) which do not have some more significant value are located within the 50 meters range. Therefore, in the assessment certain remarks have been made about the impact of the new expressway during the construction period. For all the other values the assessment was done for the period after putting the road to use.

In order to produce the most efficient evaluation of the cultural heritage the HIA was typologically divided into several categories as shown below:

- Archaeology;
- Buildings and complexes;
- Cultural landscape;
- Intangible Cultural Heritage or Associations.

4. Baseline

Ohrid is one of the few Balkan cities whose existence can be traced along two and a half millennia. At the core of today's city is the ancient city of Lychnidos which importance and cultural richness is as big as the successor's one (the city of Ohrid). The official historic documents trace Lychnidos back to the III century B.C. However, the legends claim that the Phoenician Cadmus and his wife Harmonia were the city's founders. The archaeological excavations serve to complement the historic documents and to prove the greatness of the ancient Lychnidos. The necropolis found in the vicinity of the area of Deboj, in the heart of the city, is the richest necropolis found in Macedonia so far. In the surroundings of this area the ancient theater was found. Today, the theater serves as an event location for the modern performers and visitors. It succeeds in bringing back the atmosphere of the theater in the ancient times, if just for a moment.

So far, in the Ohrid region more than seven early-Christian basilicas have been found. Among them, the Polyconchal church stands out with its complex architectural design and its splendid mosaics. It is believed that it was the cathedral church of the Lychnidos episcopate, founded as early as the IV century AD. The metamorphosis of Lychnidos into Ohrid which created one of the most important medieval cities in the Balkans, went on for a few centuries (VI-IX). It is the symbol of Slavic literacy and culture whose main proponents St. Cyril, St. Methodius, St. Clement and St. Naum spent a considerable amount of their lives in Ohrid. St. Clement is considered to be the patron saint of the city. According to his hagiography he taught around 3500 students, which marked the foundations of the first Slavic university.

Tzar Samuil's fortress was situated in Ohrid at the beginning of the XI century. The protective walls still today surround the old city core and they are called the Samuil Fortress as a tribute to the mighty emperor. It was also the main seat of the Ohrid archbishopric, which was an important religious organization whose members were one of the most influential theologians, philosophers and writers. Its worthy successor today is the Macedonian Orthodox Church.

All these turbulent events have left their marks on the city and its history. Some of the monuments which were of great value still stand tall today. For example, the St. Clement's monastery - St. Panteleimon, the St. Naum monastery, the cathedral church of St. Sofia, the churches St. John Kaneo, St. Clement and many more creations: frescos, icons, manuscripts, all incorporated in the city of UNESCO - Ohrid.

The Management Plan for the natural and cultural heritage in the Ohrid region categorizes the different cultural values:

Cultural values

According to the main principles of the Convention concerning the Protection of the World Cultural and Natural Heritage, the Outstanding Universal Value (OUV) of the cultural-historic region, in which the monumental complexes of the cities of Ohrid and Struga are included such as the

monastery complexes of Archangel Michael - St. Naum, St. Mother of God Zahumska, St. Mother of God – Kalishta and St. John Theologian – Kaneo, and the many of settlements, is due to the quality of the specific architecture and the unity between cities, villages and the nature around the lake.

The richness of the cultural, historic, architectural, archaeological and ethnologic values, which give the region its quality, individuality and authenticity, through their protection, diversity and integrity, are the main components that provide opportunities for the region to represent a public good of most important national significance with universal values for mankind, its history, culture, art and science.

Cultural area

The territory of the Ohrid region as a world heritage site represents an integral good of the inherited natural and cultural values in which the diverse and rich architectural heritage is intertwined with nature and inseparable of it. This makes the protected area a category in which history, cultural and traditional continuity and the social values are interconnected with the natural beauty of the region. Places which have been identified to have such values are: the monastery complex St. Mother of God - Zahumska, Roman Castrum, the fishing settlements Trpejca and Peshtani, and Kaneo above which rises the church St. John Theologian - Kaneo, the monastery complex in Kalishta and so on.

Cultural heritage

The basic monumental values of the Ohrid region are a collection of historically protected urban cores, natural urban structure, the combination lake-shore, the spiritual centers and organic urban structure along the coastline with their specific lifestyles, as well as rural settlements situated in conserved ecological natural environments. The defined urban heart of the old city core abounds in archaeological localities, spiritual centers and a specific house architecture which is representative for this region (Formed in a timeframe going back to the prehistoric times till the XIX century), as well as the architecture influenced by the European neoclassicism. In the protected area of the city, several objects have monumental status: 23 Christian sacred buildings, 74 profane buildings, 7 buildings with Islamic architecture and 10 archaeological localities. While in the protected area of the city of Struga there are the following: 24 profane buildings, 3 buildings with Islamic architecture and 1 Christian sacred building

Cultural-artistic values

Cultural-artistic values of the protected object with all their globally recognized attributes are the following:

- *Painting*: mosaics, frescos, icons, wall decorations, manuscript illuminations, graphic arts, paintings on canvas;

- *Sculpting and wood-carving*: sculptures, stone relief, iconostasis, bishop thrones and other church furniture, wooden carved decorations;

- *Applied arts*: ceramic objects, glass, wood, metal, textile, leather, paper etc;

- *Immaterial cultural heritage*: traditional customs and religious and cultural events.

5. Impact Assessment

5.1 Outstanding Universal Value

According to the Management Plan which is in the phase of adoption the OUVs are defined through the integrity and authenticity of the protected objects.

The Ohrid region is situated along the shore of the Ohrid Lake, which was formed as a result of a movement of the tectonic plates many centuries ago. The city of Ohrid, the city of Struga, along with a number of fishers settlements along the shores of the lake and the vast number of archaeological sites and Christian spiritual centers, the Ohrid region is an exceptional universal value as a combination of natural phenomena and human creation.

The Ohrid basin has formed by the tectonic movements in the Tertiary period, more than 3 million years ago. The Ohrid Lake is the deepest lake in the Balkan Peninsula and it is the last remnant of the ancient water region of the Euro-Asian continent before the ice age and contains new fossils from the Tertiary system. A vast number of plants and animals are still preserved and live there, as well as 212 endemic species of snails, worms, lake sponges, algae, 17 endemic species of fish, 87 bird species, as well as wetlands vegetation with glacial origins. The Ohrid Lake with its endemic species and a surface area of 358.2 km² is most probably a lake that has the largest variety of flora and fauna in the world

The geographical diversity of the mountain Galichica is made out of all kinds of landscape forms, which are typical for karst regions

Located on the Ohrid Lake shores, the city of Ohrid is one of the oldest human settlements in Europe. Built mostly between the VII and the XIX century it is the seat to one of the oldest Slavic monasteries and more than 800 Byzantine icons that have world fame and painted between the XI and XIX century. The Ohrid architecture is one of the best preserved and the most complete collection of urban architecture in this part of Europe. The Slavic culture was spreading from Ohrid across the other parts of Europe. Archaeological investigations found more than seven basilicas which have been discovered in the old part of the city, and which date from the period between the IV, V and the beginning of the VI century and whose architectural and decorative features convey the powerful rise and glory of the ancient city of Ohrid (Lychnidos). The city's core is full of archaeological localities, early-Christian basilicas many of which have mosaic floors.

Although the city of Struga is located along the shores of the Ohrid Lake, its main feature is the river Crn Drim, which has a natural phenomenon flows out of the lake. The origins of Struga are related to the pile dwellings in the Ohrid Lake. The diverse archaeological localities date back to the neolithic period, bronze period, Macedonian-Hellenic period, Roman period and the period of the early Middle Ages.

In the year 1980 a change was made in the nomination of Ohrid with adding of criteria for cultural heritage (i) (iii) (iv) and (vii) and Ohrid has been added to the World Heritage List of UNESCO in the category of MIXED HERITAGE.

Criterion (i): The town of Ohrid is one of the oldest human settlements in Europe. As one of the best preserved complete ensembles encompassing archaeological remains from the Bronze Age up to the Middle Ages, Ohrid boasts exemplary religious architecture dating from the 7th to 19th centuries as well as an urban structure showcasing vernacular architecture from the 18th and 19th centuries. All of them possess real historic, architectural, cultural and artistic values. The concentration of the archaeological remains and urban structures within the old urban centre of Ohrid, along the coast of Lake Ohrid as well as the surrounding area creates an exceptional harmonious ensemble, which is one of the key features that make this region truly unique.

Criterion (iii): The property is a testimony of Byzantine arts, displayed by more than 2,500 square metres of frescoes and more than 800 icons of worldwide fame. The churches of St. Sophia (11th century), Holy Mother of God Perivleptos and St. John Kaneo notably display a high level of artistic achievements in their frescoes and theological representations, executed by local as well as foreign artists. Ancient architects erected immense basilicas, which were to serve as models for other basilicas for centuries. The development of ecclesiastical life along the shores of the lake, along with its own religious architecture, frescoes and icons, testifies to the significance of this region as a religious and cultural centre over the centuries.

Criterion (iv): The Lake Ohrid region boasts the most ancient Slavonic monastery and the first Slavonic University in the Balkans – the Ohrid literary school that spread writing, education and culture throughout the old Slavonic world. The old centre of Ohrid is a uniquely preserved, authentic ancient urban entity, adjusted to its coastal lake position and terrain, which is characterised by exceptional sacred and profane architecture. The architectural remains comprising a forum, public buildings, housing and sacred buildings with their infrastructure date back to the ancient town of Lychnidos (the former name of the town). The presence of early Christian architecture with the lofty basilicas from 4th to 6th centuries, together with the Byzantine architecture with a great number of preserved sacred buildings of different types from 9th to 14th centuries, is of paramount importance and contributes to the unity of the urban architecture of the city.

Criterion (vii): The preservation of Lake Ohrid dating from pre-glacial times is a superlative natural phenomenon. As a result of its geographic isolation and uninterrupted biological activity, Lake Ohrid provides a unique refuge for numerous endemic and relict freshwater species of flora and fauna. Its oligotrophic waters contain over 200 endemic species with high levels of endemism for benthic species in particular, including algae, diatoms, turbellarian flatworms, snails, crustaceans and 17 endemic species of fish. The Lake Ohrid region also harbours a rich birdlife.

5.2 Integrity and authenticity of the natural and cultural heritage of the Ohrid Region (Cultural Landscape)

The Ohrid Region is located along the coast of the Ohrid Lake, which in geological terms was formed ages ago through tectonic movements of the ground. It fascinates with its beauty. In the complete region included are the historical monumental whole of the Ohrid as the regional center, then the town of Struga, which is located along the river Crn Drim, that flows out of the Ohrid Lake, few fishing settlements located along the coastline of the lake, as well as the large number of archeological sites and Christian religious centers. It can be concluded that Ohrid as a region has Outstanding Universal Values (OUV) that occurs from the unique combination of natural phenomena and human activity.

During evaluation of the region, particular importance is given to the specific characteristics as mentioned: geomorphologic, topographic specifics, views (view points), the attractiveness of the region and the climatic specificities. The most famous mountain in this region is the mountain Galichica which is also a National Park, with its highest peak Magaro (2255 m) and Kota 10 (2265 m). In this region another mountain is also situated near to Struga, that is the mountain Jablanica which has several peaks higher than 2000 m above sea level.

The old urban core in Ohrid is a complex of monuments which dating, confirmed by the artifacts and preserved objects, it continues uninterrupted since the prehistoric period, through the ancient and late-ancient times, early Christian period, middle ages, Ottoman period till today (the period of the IV century BC till today). The city was formed in specific natural, geographic, historical, ethno – social and esthetic living conditions, without city planners and architects this city has risen and developed into a distinctive harmony without the tendency of usurpation of space and views.

The city of Ohrid is a rare architectural-artistic masterpiece and achievement as well as a rich treasury of architectural buildings, tangible and intangible values and a huge concentration of significant monumental goods.

The long historical continuity of this area, with exchanges of culture between East and West, on this small territory has established a unique and specific identity, as it can not be seen anywhere outside of the region.

Authenticity of natural and cultural heritage is defined through the outstanding universal values which are individually explained in the text below. The provided conclusions will be combined with a separate Report on the Visual Impact Assessment.

5.2.1 Integrity

Despite a minor modification in 2009, the current boundary of the property still does not fully encompass all of the features that convey the property's Outstanding Universal Value. Most notably in relation to its natural values, the integrity of the property is limited since only two-thirds of Lake Ohrid located in the Republic of Macedonia as well as a small part of the lake's basin have been inscribed. The integrity of the property could be strengthened by extending it to the remaining one-third of Lake Ohrid located in Albania and including other areas essential to the protection of the lake's watershed, in order to adequately protect the lake's exceptional biodiversity. The integrity of the lake which is divided between two countries – Macedonia and Albania is the subject of the project "Upstream process" started since 2014, coordinated by the Center for World Heritage by UNESCO, in which expert groups from the Republic of Macedonia and Albania work on expanding the borders of the protected area. The aim is to protect the lake as a whole, given the fact that the existence of administrative borders is unacceptable to the natural treasures of the world.

Main threats to the integrity of the property include uncoordinated urban development, increasing population, inadequate treatment of wastewater and solid waste, and tourism pressure. In addition, pollution from increased traffic influences the quality of the water, which leads to the depletion of natural resources.

The integrity of the property suffered to some extent, as several houses built at the end of the 19th century were demolished in order to exhibit the excavated remains of the Ancient Theatre. The overall coherence of the property, and particularly the relations between urban buildings and the landscape, is vulnerable to the lack of adequate control of new development.

RECEPTOR SENSITIVITY:	medium	According to the number of registered cultural goods, monuments and complexes in the area where the Expressway passes, the significance of OUV is on a medium level that can be seen from all previously listed criteria. That is because there is no mention of any complex of important monuments that are located near the route. The only thing that we can say is that the Expressway passes through the area of the National Park Galichica where the natural values dominate.
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IMPACT MAGNITUDE:	Building/fabric Minor (beneficial)	The development of the Ohrid Region should be part of the total development of the Republic of Macedonia (RM) and it will contribute to the improvement of its economic and social performances. Therefore the development must be strictly controlled and permitted within the strict limits that will not damage the OUV of the region. The projected expressway will improve the connectivity of this region especially with Peshtani and Elshani which will contribute to their overall development. The improved connectivity means dividing and allocating the crowds, especially in the main season which had negative impacts on the OUV. From the perspective of the integrity the expressway will not threaten the total integrity of the space and the individual cultural monuments. The increased functionality of the space provided by the traffic connection of the expressway will improve the integrity as a link between the city of Ohrid and the settlements along the route, as well as Ohrid and the other side of the lake as a tendency to expand the protected area on the Albanian side which has begun with the project "Upstream process" in the year 2014.
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	Context/settings Negligible (adverse)	The area suffers serious changes caused by construction activities as a result of uncoordinated urban development. Thus, the integrity of the Ohrid Region has already been disturbed. The connection between the lake and the settlements, between the natural and cultural heritage, will partially be disturbed with the construction of the expressway. The natural processes will be interrupted because of the isolated route which will pass through the area. The increased circulation of cars and tourists can increase the pressure on the cultural heritage.
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		Impact magnitude				
		No change	Negligible Context/ settings	Minor Building/fabric	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

5.2.2 Authenticity

The city of Ohrid is reasonably well preserved, although uncontrolled incremental interventions have impacted the overall form of the monumental urban ensemble as well as the lakeshore and wider landscape. These are also vulnerable to major infrastructure projects and other developments.

Concerning the religious buildings, important conservation and restoration works have been carried out since the 1990s. Conservation works on the monuments in the region have been thoroughly researched and documented, but some have impacted the property's authenticity. The icons and frescoes are in good condition and kept in the churches.

The originally residential function of some buildings has been changed over time, as have some of the interior outfitting of residential buildings, which were altered to improve living conditions. While reconstructions often used materials identical to those used at the time of

construction, new materials have also been used on occasion, which presents a threat for the authenticity of the property.


RECEPTOR SENSITIVITY:	Medium	Crucial element of the authenticity of the area is the city of Ohrid with its complexes of monuments, and according to the analyses this area very slightly plays a part in the overall authenticity of OUV. From the protection point of view as a mixed cultural heritage, or the fusion of nature and culture, the authenticity can be evaluated on a higher level and a final assessment grade would be medium .
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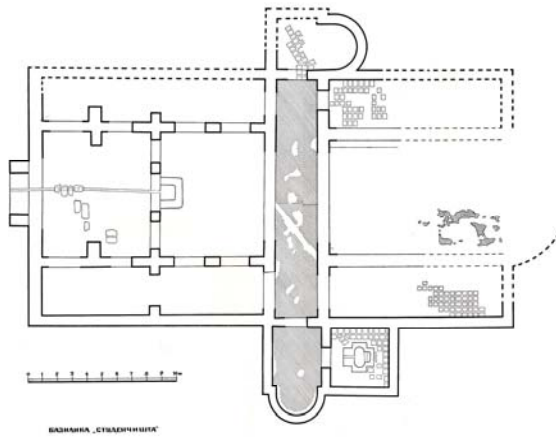
IMPACT MAGNITUDE:	<p>Building/fabric Negligible (adverse)</p>	<p>The construction of the expressway will not disrupt the authenticity of cultural heritage in any of its segments or complexes of registered cultural goods. There is a risk of accelerating the process of urbanization in relation to the old buildings. Examined from the aspect of conservation there will not be any direct impacts because of the distance of monuments from the route. No pressure will exist by the presence of numerous cars, as well as the negative effects of pollution and other adverse occurrences will be low. It can be assessed that the old and abandoned villages will be more accessible and will have more opportunities for revitalization and inserting new contents in the function of rural development.</p> <p>In terms of these parameters we can register individual positive and negative impacts, summarizing a total assessment of negligible (adverse) because of the integration of natural and cultural heritage in this area.</p>
	<p>Context/settings Minor (adverse)</p>	<p>Authenticity of the given area is measured by the whole called Cultural Landscape. The road which will through the National Park Galichica will be seen from Ohrid, from the side of the lake, from Albania and it will affect the visual impression of authenticity of the area.</p> <p>Due to uncontrolled urbanization the authenticity is already impaired with the construction of new buildings (like the new settlement of Racha).</p> <p>Because of the modest remains of the cultural heritage such visual disturbances in the area can be evaluated as minor (adverse)</p>

		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/ settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

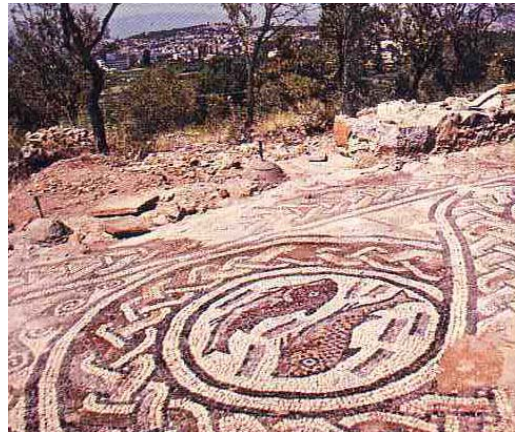
5.3 Archeology

According to the document “Report of the National Institute: Institute and Museum Ohrid no: 13-1280/2 from 01.11.2012”, according to the field research by the HIA experts and the tour along and surrounding the planned route, in order to verify all registered and recorded archeological sites mentioned in the “Archeological map of Republic of Macedonia”, below are the archeological sites that were subject of the impact assessment.

1. Basilica – Studenchishta	
	<p>On the slopes of the mountain Petrino, near to the springs “Biljanini Izvori” in Studenchishta, there are remains of another basilica. According to previous research this early Christian building dates back from the V-VI century.</p> <p>On its floor mosaics, in circular medallions, are presented long-legged birds, introduced in reserved movements, and also presented are fish in the water which is maybe the most important representation of such kind of the whole region.</p> <p>The motive of a fishing knot, as well as the ornament in the form of fishing scales on the mosaics in some buildings from the Late Antiquity and early Christian period in this region, speak about fishing which is one of the oldest professions of people who lived here and that the Ohrid Lake was full with fish</p>
<p>6 Map of the location of the basilica in terms of road</p>	



7 Drawing from the foundations of the basilica Studencishta



8 detail from the mosaics in the basilica Studencishta



9 View from Basilica to the road



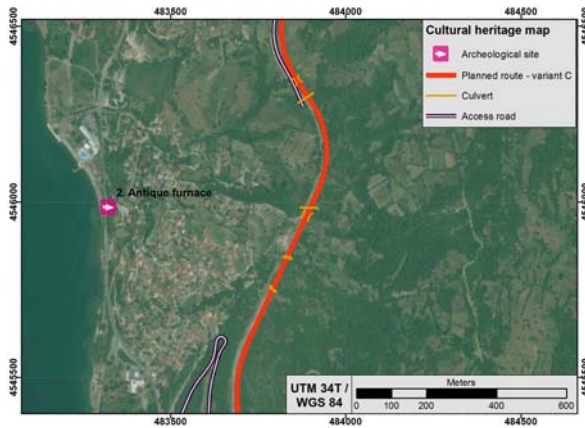
10 view from the road in the direction to the basilica

<p>RECEPTOR SENSITIVITY:</p>	<p>high</p>	<p>The Basilica “Studencishta” is an archeological site and part of the archeological heritage of the Ohrid Region and a constitutive part of the overall OUV. This building is located 65 m westwards of the projected route. This site is still insufficiently explored; it has not been conserved recently and is not marked as a site. It does not have a new function, it is only used for visits by the tourists and the only access route is only a non-regulated walkway As a receptor it can be graded with high sensitivity.</p>
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IMPACT MAGNITUDE:	Building/fabric negligible (adverse)	<p>The new expressway will change the accessibility to the site because it will pass close to it and over the old access road. The newly projected road is located at a distance of 65 m and it will not have any influence on the remains of the site during construction.</p> <p>On the other hand this distance does not threaten the future archeological excavation on the site, because it is not expected its limits radically to be changed. Therefore the assessment of the tangible characteristics of this archeological site would be graded negligible.</p>
	Context/settings no change	<p>The views on the site will not be affected by the new road but also the whole context of the archeological site will not be affected, because the remains are only foundations and it is invisible from all points that form the cultural landscape of this site. Because of the green buffer zone from the projected expressway there will not be any sound disturbances and there will be no noise that would disturb the tourists during visits.</p> <p>Assessing the context and the visual integrity of the monument it can be graded with no change.</p>

		Impact magnitude				
		No change Context/ settings	Negligible Building/fabri c	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

2. Archeological site “Antique furnace” – Sv. Stefan



The archeological site “Ancient furnace” dates from the roman period (III-IV century), it was used for baking pottery. It is located on the road from Ohrid - Sv. Naum. It belongs to the category of recorded but not protected goods which possesses elements to be declared as a monumental good. However, certain preventive protection measures were taken, with a detachable overhang, but because it is not fenced, it has been damaged by negligent citizens with writing graffiti on the walls of the furnace.

11 Map of the location of the Antique furnace in terms of road



12. Antique furnace

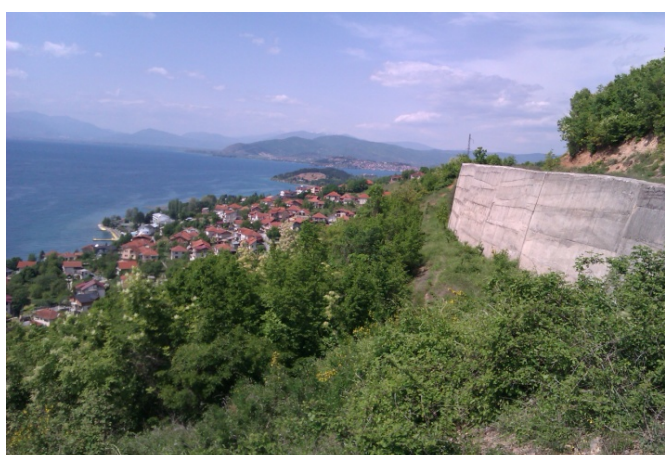


13 location of the Antique furnace near the existing road

RECEPTOR SENSITIVITY:	Negligible	The archeological site “Ancient furnace” dates back from the roman period. Because it does not possess any monumental good it is not a protected good, so the assess in this case would be negligible
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IMPACT MAGNITUDE:	Building/fabric no change	According to the current situation this archeological site is located on the road Ohrid – St. Naum in the settlement Sv. Stefan. Because of this fact it can be concluded that the construction of the new route would not interrupt the site, because its location is far away or 550 m from the road.
	Context/settings no change	The views in this case will not be disturbed due to the distance of the new road. Also the current location near to the old road does not cause any visual effect on the ancient site.

		Impact magnitude				
		No change Context/ settings Building/fa bric	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight



14 View from the route towards Konjsko settlement and the lake

5.4 Buildings and complexes (tangible and intangible heritage)

The buildings located along the route can be distinguished into buildings that have a religious purpose and buildings with profane purpose. Only two of the buildings with religious purpose are built significantly earlier in the past, than the others which are newly built on previous cult places.

On the territory of the Ohrid region urban agglomerations are formed with specific organic-like urbanism through the establishment of two urban cores, several fishing villages and even more rural

settlements where the so called urban tissue grows and develops according to the needs of the

people living there. In the natural landscape enriched with unforgettable views of the lake combined with the rich green mountain slopes, the natural springs and the bases of steep rocky areas, as well as the mystique of the region, numerous spiritual centers (monasteries) were created.

General characteristics:

The villages in the Ohrid region can be divided into two large groups according to their location. In the first group are the lowland villages located in the Ohrid plane as well as on the peripheries of the planes or the bases of the mountain slopes and along the water courses. The second group of villages comprises the mountainous villages that stretch along the east coast of the Ohrid Lake. The villages included in the analysis along the route of the expressway can also be divided according to their population, or they can be inhabited and abandoned rural areas. Generally, these villages and settlements are characterized by average level of population excluding Shipokno and Gorno Konjsko which are abandoned, but also have high rural - architectural qualities which themselves are especially challenging for more comprehensive analyses. The whole area has excellent natural - climatic values with a relatively good infrastructure, asphalt roads, electrification, availability of telephone communication, television, post office. Villages are agglomerations with relatively compact rural structure that form around a river or access road, which is characteristic for most villages in western Macedonia. Their central areas or the village squares are not as prominent as in the lowland villages. There they represent wider spaces, usually with a spring or fountain but nowadays with tourist-catering contents. Visible becomes the desire for returning to the village lifestyle with some newly constructed concrete and mortar building but also even some weekend houses that stand out from the other older buildings which have somehow grown together with nature and the environment.

There is a clear division between the neighborhoods that form along the smaller streets that branch from the main road and comprise the street network. In the peripheries of the villages some auxiliary facilities for economic activities can be found. The panorama of the villages is almost always obscured with rich vegetation. This region is rich in waters which splash from the village fountains can be heard from far away. The highest positions in the villages are occupied by the churches that are at least two, three or more in every village. Also there are some monastery complexes in the distant hills surrounded by the beautiful nature and viewpoints towards the lake.

Architectural-construction features

Almost all the time the buildings follow the stretching of the isohypses and depending on the location and orientation they are with their axis longitudinally or transversely towards the decline of the terrain, but also always open towards the south, east or west with the necessary sunshine and good views of the lake. The architectural concept of the house as a living space is with a clear functional differentiation between the residential and economic section. They have ground floor and first floor (rarely with a second floor, depending on the inclination of the terrain). On the ground floor the economic parts - basements or open porches are located. On the first floor are the rooms which can be reached by internal or external stairs through an open veranda. Nowadays in Velevostovo, Konjsko, Elshani and Peshtani new facilities are being built that are almost always in favor of tourism and hospitality.

Building materials and construction



15 House in Gorno (upper) Konjsko

Rarely authentically preserved buildings are found on which improper interventions haven't been conducted and they are often in ruins. The main concept is the construction of stone walls with mud and reinforced with wooden layers visible on the facade. One concept has a stone wall to the roof and the other with mud plaster filled with earthen bricks on the first floor. Sometimes if the floor is made of earthen bricks, is coated with wooden slats and mortar of mud reinforced with straw-sawdust or animal fibers. In the wealthier houses evident is the finishing work on the facade with lime mortar. The stone buildings often end up

with a crown of stone tiles or travertine. The roof is usually four-sided with a cover of roof tiles, sometimes with un-galvanized sheet metal. In barns usually there is a two-sided roof for using the attic space for storing hay and very rare cases for a cover of straw. Window openings are rarer and smaller on the ground floor while upstairs they are larger and usually don't have some special decoration.

All this architectural concept, spatial shaping and proportionality, indicates a higher standard of housing culture in these rural areas that were massively abandoned in the nineteen sixties with the sudden industrialization of the city of Ohrid. The few examples of returning back to the villages by young families who live and work in such an environment should be an example for a future positive and sustainable rural development of Ohrid.

With the inspection along the projected route of the Expressway Ohrid-Peshtani we have come to a realization that this diverse natural and cultural treasure that this region has, there must be special treatment in the protection as by the Ministry of Culture and by the Ministry of Environment, but also by the local authorities. Funds should be allocated for the direct protection both for the sacred, as well as for the rural profane architecture in order to preserve the authenticity of buildings which is threatened by the new inappropriate interventions on them.



16 Remains of old buildings in Peshtani

The newly built road will contribute to their revival and economic prosperity with the revitalization of existing facilities.

Since ancient times the corridor "Via Egnatia" was passing through this region which connected the East(Constantinople) and the West(Rome). The new road will have more sense with the final construction of the part of the Corridor 8 to St. Naum and will connect with the Republic of Albania via Korca. The lost contacts will be regained that were forbidden for several years during the Communist regime of Enver Hoxha.

Traditions and events (intangible heritage)

Republic of Macedonia is characterized by the remarkable cultural heritage connected with ethnographic and ethnological characteristics as well as numerous events that are created for different purposes. Tradition is one of the most important values of the different entities in this area. It creates opportunities for creating a comprehensive tourist offer. Organizing different events is often directly related to tradition as an important part of human life and are present throughout the development of human civilization



17 House in Shipokno

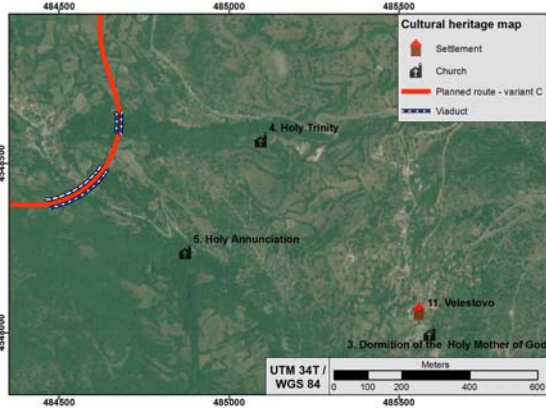
The examined region where the construction of the Expressway Ohrid - Peshtani is planned is not characterized by more important events of regional and national character. Only the city of Ohrid represents a spatial whole where events of this type are being held and are an important part of the tourist offer. From the settlements along this route only the village of Velestovo is characterized by a more significant event "Poetry night in Velestovo", while the other settlements are characterized by traditions and events of local type with religious character associated with the visit of churches.

More significant events related to religious customs are the following:

- VILLAGE VELESTOVO–Village celebration is the Assumption of Holy Mother of God on 28th August. People go to the church; everyone takes their crosses, celebrates at home and receives guests. The house celebrations are their St. Nicholas and the Virgin Mary.
- VILLAGE SHIPOKNO–Village celebration – St. Nicholas. On this day people go to the church for service, take out the crosses and after that they celebrate at home and receives guests. House celebrations are: St. Paraskeva and St. Nicholas, winter celebrations.
- VILLAGE KONJSKO – old village–Village celebration is St. Minas. People go to the church, they don't take their crosses, and everyone celebrates at home and receives guests. On the day of St. George (Gjurgjovden) the people take their crosses.
- VILLAGE ELSHANI–Village celebration is St. Elijah – 2nd August. People go to the church, and after that everyone at home receives guests and provides lunch. On Pentecost they take out their crosses. House celebrations are: St. Barbara; St. George; St. Nicholas and St. Demetrius.
- VILLAGE PESHTANI–Village celebration is the Ascension of the Virgin Mary on 28th August. People usually go to church, and after that everyone at home provides lunch and receives guests.

In addition it is important to emphasize that in the table overviews that are concerning the settlements, *building/fabric* signify the material cultural heritage while *context/settings* the immaterial (spiritual) heritage.

3. Church Dormition of the Holy Mother of God -Velestovo



18 Map of the location of the church Dormition of the Holy Mother of God in terms of road

The village church St. Mother of God is located in the central part of the village. It is a one-nave building with a semi-dome, semicircular apse, all built of stone. Most of the frescoes inside have been repainted decades ago, but the old layout of the scenes has also been respected. In the first inscription, which is located on the northern wall and dating back to 1444, the names of the donors are mentioned= Stanca, Miho, Rajko Dobrilov, Dabac and Petko.

The second inscription, written in church-slavonic writing originates from 1451 and is located above the western entrance of the interior. It mentions the Ohrid Archbishop Nicholas and the donor V'lkota, his wife Slavka, the daughter Ruvana and the sons Miho, Jacob and Nicholas. The fresco-painters of the first fresco-paintings are considerably more solid and more talented. In some places, such as in the figures of the holy warriors, painted on the northern wall, intend to get closer to the fresco-paintings of the XIV century.

Some of the most beautiful characters are those of St. Mother of God with the infant Christ, St. Nicholas and St. Clement of Ohrid painted on the southern wall. During the cultural event "Velestovo evenings", held in August, in the porch of the church St. Mother of God exhibitions are being organizing by eminent artists from all over Macedonia.



19 Dormition of the Holy Mother of God



20 view from the church to the road and the lake

RECEPTOR SENSITIVITY:	medium	<p>The location of the building is 1100 m from the road.</p> <p>The church dates back from the 15th century and is one of the oldest buildings that are located along the planned route. It is visited by locals as well as by people from other nearby places. More specifically it has regional importance.</p>
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21 The most famous fresco St. Mercury in the church Dormition of the Holy Mother of God

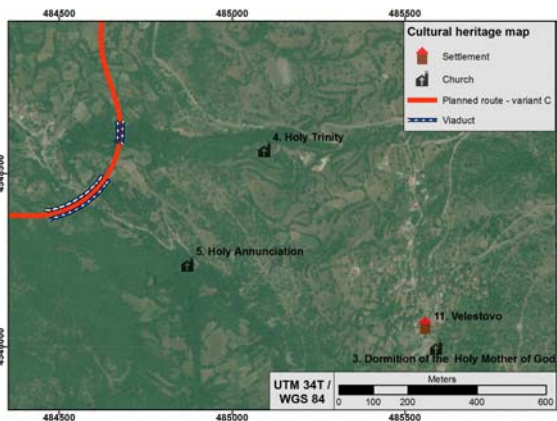


22 Dormition of the Holy Mother of God

IMPACT MAGNITUDE:	<p>Building/fabric negligible(beneficial)</p>	<p>The church is located about 1100 meters from the road. The connection between the new and the access road is being revised and improved. Thus the access will be faster and safer. The functionality will be improved by the more frequent visits, during holidays and services. Therefore it is estimated that there will be positive (negligible-beneficial) effects of the impacts.</p>
	<p>Context/settings minor (adverse)</p>	<p>Assessing the context and visual effects of the church in the broader surroundings, it was estimated that the impacts on the cultural landscape will have minor (adverse) effects.</p> <p>The panoramic view from the church towards the lake will be disrupted by the construction of a viaduct which directly hinders the view of visitors.</p>

		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

4. Church Holy Trinity – Velestovo



The church Holy Trinity is located about 1km westwards of the village of Velestovo, and it was built in 1987 after a vision - dream of the wife of Mr. Naumce Mitreski.

23 Map of the location of the Church Holy Trinity in terms of road



24 Church The Holy Trinity



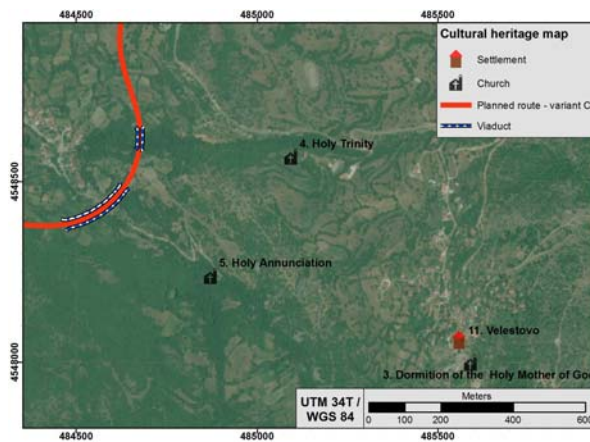
25 view from the church to the road

RECEPTOR SENSITIVITY:	Negligible	The church Holy Trinity is located 470 m away from the planned route. It has good accessibility, is used by the local population but has no broader meaning.
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IMPACT MAGNITUDE:	Building/fabric negligible(beneficial)	The construction of the new road will allow for an improved frequency of passengers. This will provide conditions for more visits during celebrations and holidays. Therefore it is estimated that there are prevailing positive (negligible-beneficial) effects of the impacts.
	Context/settings minor (adverse)	The visual effects that the church has will be affected by the construction of the road because it disturbs the view towards the lake. Therefore the impact on the context/setting of the church has minor (adverse) effects .

		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

5. Church Holy Annunciation – Racha



26 Map of the location of the Church Holy Annunciation in terms of road

The church of the Holy Annunciation is located in the village of Racha. Eastwards of this settlement - Dolno Velestovo, at the place where the small river Racha flows out of its springs, on the remains of an older church, in the 1980's a small church dedicated to the Annunciation was built. The interior was fresco-painted by Oleg Boshale from Ohrid.



27 The Church Holy Annunciation



28 view from the church to the new road and the lake



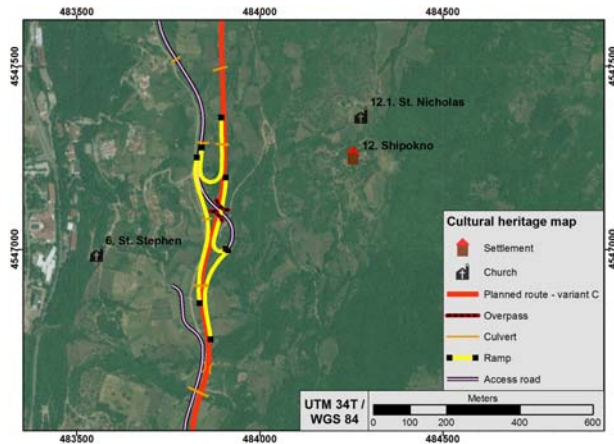
29 View from the existing road passing under the newly viaduct to the church Holy Annunciation

RECEPTOR SENSITIVITY:	Negligible	The church of the Holy Annunciation is located 350 m away from the planned route. It can be reached via the road passing through the village of Racha. Used by locals who visit the church during the celebration (feast) of the Annunciation, but also in the spring and summer time when the beautiful landscape can be admired.
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IMPACT MAGNITUDE:	Building/fabric No change	The church is located 350 m away from the route. It has a specific location and local importance. The construction of the route will have no effect on its functionality (neither increasing nor decreasing). The accessibility of the church is not threatened because it is not connected to the route. It can be reached via a local road which passes through the village of Racha.
	Context/settings minor (adverse)	The construction of the road and the viaduct will obscure the landscape view of visitors. Therefore, we concluded that the impact on the context/setting of this church has minor (adverse) effects .

		Impact magnitude				
		No change Building/fabric	Negligible	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

6. Church St. Stephen on the locality Pancir – Sv. Stefan



30 Map of the location of the Church St. Stephen in terms of road

The church was fresco-painted thanks to the help of a broad group of donors in Ohrid and the surrounding villages. This was found out from the inscription written in church-slavonic alphabet, located in the niche of the vestry. It states that the donors were the citizens of Veliki Varos – also known as Ohrid, as well as the people from the neighboring villages: Shipokno, Gorica and Konjsko.

The overall drawing style of the figures, the processing of forms, which are characteristic for their free movement, the rich applying of color, as well as the mild brown hue, this paint style is closely related to the painting of the church All Saints in the village of Leshani – Ohrid region.

The largest part of the fresco-paintings in the interior has fragmentarily been preserved

It could be concluded that the fresco-paintings in this small cave church dedicated to St. Stephen, occurred immediately after the painting of the church in Leshani, or after 1452, when there already happened some changes in the artwork of the Ohrid painters.

At around 5 kilometers south of Ohrid, on top of the workers' resort "Orce Nikolov" – locality Pancir, there is a small cave church dedicated to the first Christian martyr - archdeacon Stephen. For the building of the church a natural cave was used, which is closed on the south side with a stone wall. In the later period besides the church also konaks (residential quarters) were built.

The small semi-dome church in the hollow part of the rocks existed even before, during the time of the intensified anachoretic lifestyle on the shores of the Ohrid Lake, but only later, at the times of arts flourishing in the late XIV and early XV century, it got its fresco decoration.



31 The Cave Church St. Stephen



32 The Cave Church St. Stephen / view from the top of the rock



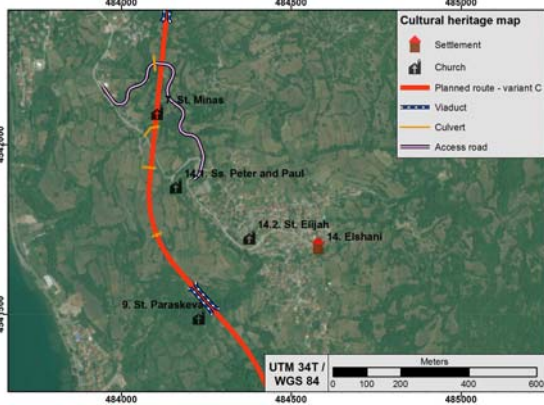
33 The complex of monastery St. Stephen / view from the existing road near the lake

RECEPTOR SENSITIVITY:	medium	At around 5 kilometers south of Ohrid, near the locality Pancir, there is a small cave church dedicated to the first Christian martyr - archdeacon Stephen. The church is built in a natural cave with a southern stone wall. Just next to the church, in the later period, konaks were built. There are also a large number of accommodation capacities in the vicinity. Because of the location of the building in the natural space and the particularities of the fresco-paintings, the church has regional significance (medium).
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IMPACT MAGNITUDE:	Building/fabric No change	The church St. Stephen is located at a distance of 270 meters from the lower side of the road, westwards of the route. Given the fact that the planned route is sufficient distant from the church, it that does not threaten the access because the old approach will still be used. Therefore, the functioning of the new complex of konaks (lodgings, dormitories) will not be obstructed.
	Context/settings No change	The route will pass through a plateau behind the church, far from the views and visitors who will see the monastery from the underside (from the lake). The wonderful views from the konaks are not endangered because the route will be above the monastery.

		Impact magnitude				
		No change Building/fabric Context/settings	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

7. Church St. Minas – Elshani



In the vicinity of the village of Elshani there is the church dedicated to the Holy Martyr and Warrior Minas. It is located in the direction above the tourist camp Eleshec, from the left side of the road that leads to the village of Elshani. It was built in the year 2000. This church is built on an older cult site. Around the church there are very old oak trees.

34 Map of the location of the Church St. Minas in terms of road



35 The Church St. Minas in terms



36 View from the church to the new road and the lake

<p>RECEPTOR SENSITIVITY:</p>	<p>Negligible</p>	<p>The church of St. Minas is located just 13m from the new planned route. The church is located in the direction above the tourist camp Eleshec, on the left side of the road that leads to the village of Elshani and was built in the year 2000. This church has been built on an older cult site. As a church it has only local significance.</p>
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IMPACT MAGNITUDE:	<p>Building/fabric Minor (adverse)</p>	<p>The church St. Minas is located just near the newly planned road, or just 13m away. With the construction of the road the access to the building will be improved because people can visit it by car. Because of the proximity of the new road, the noise levels will be increased. Furthermore, the pollution of the cars will adversely affect the functionality of the church. More specifically, the free conducting of liturgy and celebration of certain religious holidays such as the celebration (feast) of St. Minas will be reduced.</p>
	<p>Context/settings minor (adverse)</p>	<p>Given the fact that the road is much too close to the church, the total landscape will be disturbed. Therefore the assessment of the impact on the context/setting of the locality would be graded minor (adverse).</p>

		Impact magnitude				
		No change	Negligible	Minor Context/settings Building/fabric	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

8. Church St. George – Peshtani



37 Map of the location of the Church St. George in terms of road

The locality "Gorno Selo" ("Upper Village") is the place for which villagers have many times claimed that the old village of Peshtani existed there. It is a cult place has a spring which water is considered to have healing properties, it is God-given, it flows throughout the year and is regularly is visited by locals. Few years ago at the site of the spring people erected a church in the honor of St. George the Victorious.



38 St. George with new road behind



39 View to the church and to the new road behind



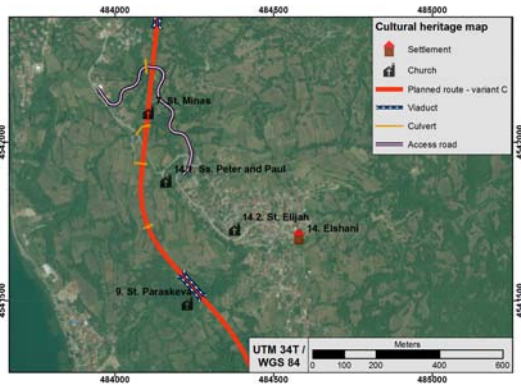
40 View from the church to the lake

RECEPTOR SENSITIVITY:	Negligible	In the locality "Gorno Selo" in the settlement Peshtani where the locals claim that there is "holy water", some several years ago they built a church dedicated to St. George. Therefore the church has only local significance.
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IMPACT MAGNITUDE:	<p>Building/fabric Negligible (adverse)</p>	<p>The church St. George is located very close to the planned route, only 40 meters below it. With the construction of the route the accessibility will not be disrupted because it will continue through the old road. The new road does not interfere with the old one, but there could be some risk of vibration and loud noise.</p>
	<p>Context/settings Minor (adverse)</p>	<p>The road is being built on a place where there are holy waters, which can lead to disruption of the natural underground water flows and drying up of these "holy water" springs. Therefore the concluded assessment for the impacts on the context/settings of this locality would be graded minor (adverse). There will not be any visual disturbances towards the lake because the road is passing above the church.</p>

		Impact magnitude				
		No change Building/fabric	Negligible	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

9. Church St. Paraskeva (holy water) – Peshtani



41 Map of the location of the Church St. Paraskeva in terms of road

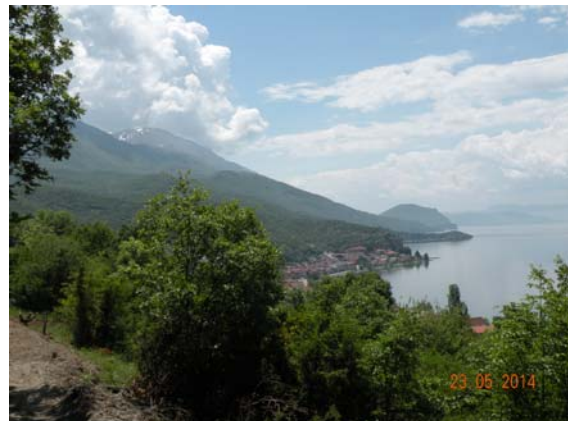
The church St. Paraskeva is located approximately 1 km northeast of the village church Holy Unmercenaries, or about 400 meters from the last houses of Peshtani. The church is an old cult place, which was proven by the excavated ancient coin dating from the IV century found in the place called “Lekohta Voda” (“Healing Water”). Situated in an impressive landscape from where sounds from multiple sources can be heard, and a new church is being built on the site of the small chapel dedicated to St. Paraskeva – Great Martyr.



42 The path to the St. Paraskeva



43 New building of to the church St. Paraskeva



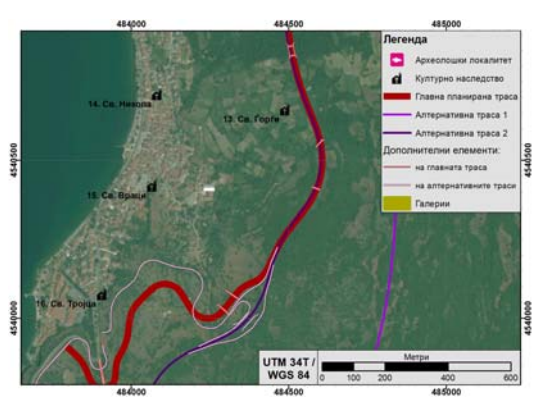
44 View from the church to the lake / new road is behind

RECEPTOR SENSITIVITY:	Negligible	The church is still under construction. The location has greater importance only to the local population because there are the so called "holy waters".
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IMPACT MAGNITUDE:	<p>Building/fabric No change</p>	<p>The church is located at a distance of 110 meters below the new road. Accessibility of the church will not change because people will continue to visit it via the old road.</p>
	<p>Context/settings No change</p>	<p>The visual character in this case will not represent a problem because the new road will be located above the church and the view towards the lake will not be disturbed. While on the other hand, this church can not be seen from the side of the lake. In the locality there exist so called "holy waters" while the construction of the road, because of its greater distance from the locality, will not disturb the underground water flows. Thus the tradition for visiting the church during holidays and celebrations will not be hindered, as well as the rituals of washing and drinking the "holy waters".</p>

		Impact magnitude				
		No change Building/fabric Context/settings	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

10. Church St. Nicholas, archeological site Dzamishte – Peshtani



45 Map of the location of the Church St. Nicholas in terms of road

The site St. Nicholas is located in the middle of the village Peshtani, next to the newly constructed power station. On the same spot are the remains of an old church. In 1995 the base of the central part of the church was discovered, which continues under the power station. North of these remains several burial structures loom. The church St. Nicholas was built by George Puvtoski from Peshtani, according to his dream and with his own hands and funds. The construction was started in 2004 and completed in 2005. It was fresco-painted by the hand of Alexander Patcev from Ohrid with the help of his son Nikola. The consecration of the church was done on April 14, 2006 by the local priest in the presence of numerous guests.



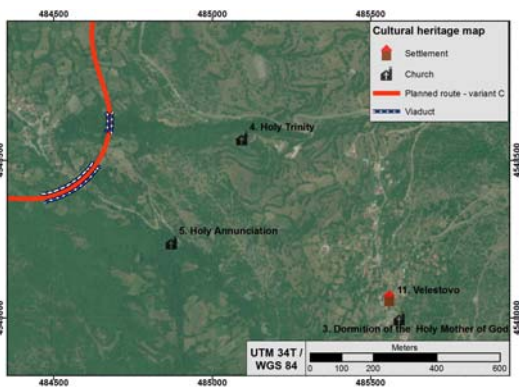
46 Church St. Nicholas / built on the top of older sacral building / around is archaeological site called “Dzamishte”

RECEPTOR SENSITIVITY:	Negligible	The church St. Nicholas is newly built and has only local significance.
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IMPACT MAGNITUDE:	Building/fabric No change	The church St. Nicholas is located in the lower part of the village and the access to it is directly connected to the existing road. The distance of the church from the new road is 410 meters and there is no direct relation between the impacts of the newly built road with it of any kind.
	Context/settings No change	The visual character will not be decreased in any sense, because the church is located in the inner part of the village.

		Impact magnitude				
		No change Building/fabric Context/settings	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

11. Village Velestovo



The village Velestovo is 4 km away from Ohrid. There is an asphalt road that leads to the village. The village has beautiful view of the Ohrid Lake and the city of Ohrid, that contributes to the attractiveness of this village and the development of rural tourism. Only 7 – 8 households live there permanently. According to the 2002 census in this village live 45 inhabitants, all older than 15 years. Demanding better living conditions people often moved. Mostly in the settlement Racha or in the city of Ohrid. From the residents who live in the village throughout the year, the majority are retired people and only few do sheep-breeding.

47 Map of the location of the Velestovo settlement in terms of road



48 One of the existing road of Velestovo settlement



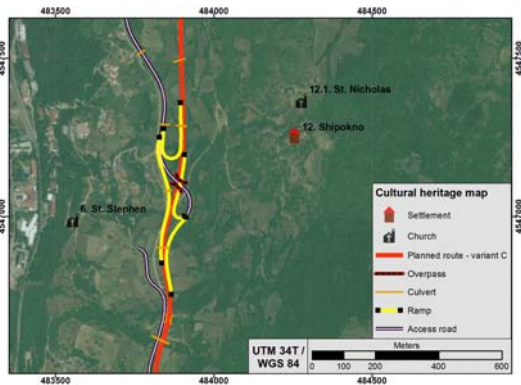
49 view from the village to the road and Ohrid

RECEPTOR SENSITIVITY:	Low	The village is located 1100m away from the new road. Most of the inhabitants who lived in this village nowadays live in the settlement Racha. In Velestovo are located apartments which are visited by domestic and foreign tourists. Because of this, but also because of the beautiful landscape that this village has it can be concluded that it has low (regional) significance
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IMPACT MAGNITUDE:	Building/fabric Negligible (beneficial)	Accessibility is going to be improved. With the improved communication the potential for rural tourism will be increased with the tendency of sustaining the complex of old houses.
	Context/settings minor (adverse)	The panoramic view from the village to the lake will be disturbed by the construction of a viaduct, which directly impedes the view of visitors. It should be considered that the traditions associated with the sacred and profane buildings and holy places are not compromised by the new road because they are in the area of the village where the route does not pass. Assessing the context of the visual effects and the location of the village the grade would be minor (adverse) .

		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

12. Village Shipokno



50 Map of the location of the Shipokno settlement and church St Nicholas in terms of road

Unfortunately the latest alterations changed everything and nothing left of the original painting and architecture. For the first time this church was mentioned in donor's inscription of the cave church St. Stephen-Pancir in XV century.

The village Shipokno is near to the touristic camp Sv. Stefan on the mountain Galichica , 1000 m above sea level. The old village is almost abandoned and the inhabitants moved to a lower point, just above the cave church of St. Stephen – Pancir. The village church of St. Nicholas is a one-nave building, constructed of crushed stone and processed travertine, and a semi-circular apse. It has not been fresco-painted in the inside, except the dome, and the iconostasis was only recently made.



51 Existing road to the Shipokno settlement



52 View to the church St. Nicholas / Shipokno



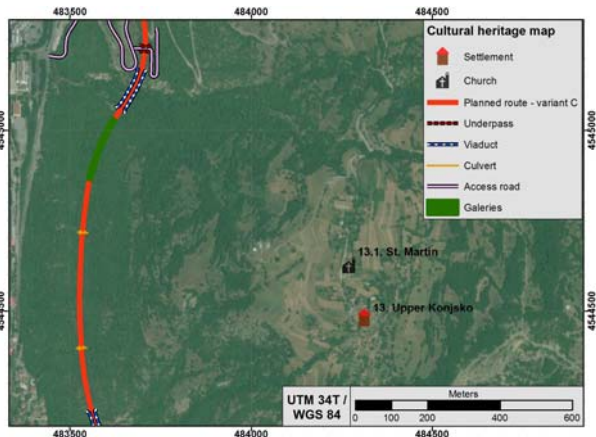
53 The church St. Nicholas / Shipokno

RECEPTOR SENSITIVITY:	Negligible	Shipokno is an almost abandoned village. From the cultural heritage only the church of St. Nicholas left. It is visited only by the local population
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IMPACT MAGNITUDE:	Building/fabric Negligible (beneficial)	The construction of the new road just 400 m away the access to the village will be improved. This village has potential for rural development, because there still can be seen old buildings (houses), but there also is the old school.
	Context/settings No change	The view of the village towards the lake would not be changed by the expressway, because it is located below the village, on a place which is between two hills. Furthermore, the view of the lake to the village will not be changed because the village can not be seen from the side of the lake. There is no change to the sacred traditions of the local population. Therefore the grade of the assessment would be no change .

		Impact magnitude				
		No change Context/settings	Negligible Building/fabric	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

13. Village Konjsko – Gorno (upper)



54 Map of the location of the Konjsko (upper) settlement and church St Martin in terms of road

In the center of the village Konjsko a church is situated dedicated to St. Martin / St. Minas. It is built with stone, garlands of travertine, a one-nave building with an eight – sided dome. According to the remains of the ancient grave constructions found in the garden of the church, this church was built on the foundations of an older sacred object. From the inscription above the western wall of the interior it can be concluded that St. Minas was built in 1927 and painted by Krsto Nikolic and his son Rafail from Lazaropole.



55 The church St. Martin / Konjsko



56 Existing road to the Konjsko settlement



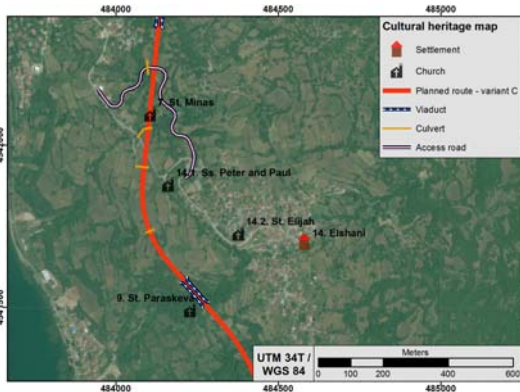
57 View from Konjsko to the lake

RECEPTOR SENSITIVITY:	low	Interesting old and preserved architecture, building heritage and rural economic facilities in the function of rural tourism. The church St. Martin is also preserved.
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IMPACT MAGNITUDE:	Building/fabric Negligible (beneficial)	The village Konjsko is located 750 m from the planned expressway, it will have a new access road above h.Metropol which will improve the overall access of the village. In the village rural economic buildings are located which could help the development of rural tourism in this area
	Context/settings minor (adverse)	The view from the village towards the lake and the old urban core will not be changed. Also traditional customs which are being performed during the holiday of St. Martin will not be changed. However the view from the Ohrid Lake towards the village will be disturbed because of the planned road gallery on the location of Crno brdo – Koprila. That is the reason why the context/setting is being assessed as minor (adverse) .

		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

14. Village Elshani



58 Map of the location of the Elshani settlement and churches St. Elijah, Ss. Peter and Paul, Holy Trinity in terms of road

Village Elshani is located on the southern slopes of the mountain Galichica, at about 800 m above sea level. On the south it borders with the village Peshtani and towards north with the village of Konjsko. It belongs to the villages with compact type of houses and there can be differentiated an upper, middle and lower neighborhood. It was founded by three current families-Shopovci, Stojovci and Juzmevci. Also in this village there are three churches located: St. Elijah, St. Peter and Paul and St. Minas.



59 View to the Elshani from the church St. Elijah



60 The church St. Elijah



61 View from Elshani to the road and lake

RECEPTOR SENSITIVITY:	low	С. Елшани е најнаселеното место во The village of Elshani is the most populated village in the Ohrid area. It has numerous characteristics which could improve the rural development. Elshani has very beautiful view of the Ohrid Lake and the city of Ohrid which contributes to be visited by a lot of domestic and foreign tourists
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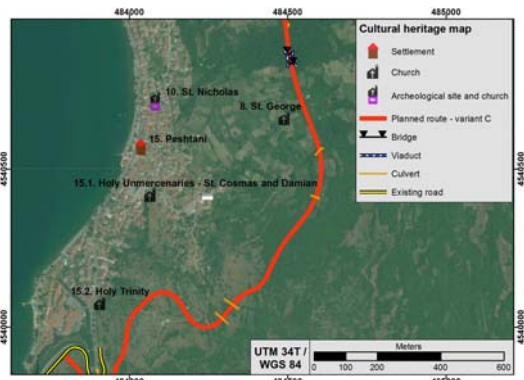
62 Ss. Peter and Paul

IMPACT MAGNITUDE:	Building/fabric Negligible (beneficial)	The village is located 350 m away from the new road. With the construction of the expressway this village would have a new access road and it will be better connected to Ohrid. For the selection of the option of constructing the new road the local residents were asked in order to satisfy their needs, but also the needs of all the residents along the route. Elshani has an important group of rural and agricultural facilities that can contribute to the development of rural tourism. In the center of village the church St. Elijah is situated from the XV century. The church St. Peter and Paul was just recently built. As a negative influence of the expressway will be the direct losing of the connection of the village with coast of the lake and the camping site of "Eleshec".
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	Context/settings minor (adverse)	The expressway passes right through the entrance of the village. This means losing the beautiful view from the village towards the Ohrid Lake. While the sacred objects associated with the village remain in areas above the road which does not hinder the conducting of religious holidays and customs by the locals
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		Impact magnitude				
		No change	Negligible Building/fabric	Minor Context/settings	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

15. Settlement Peshtani



63 Map of the location of the Peshtani settlement and churches Holy Unmercenaries - St. Cosmas and Damian and Holy Trinity in terms of road

Peshtani is a settlement located on the foothills of the mountain Galichica on the east coast of the Ohrid Lake, 12km south of Ohrid on the road Ohrid – St. Naum. In the past the inhabitants dealt with fishing and farming, but nowadays these economic branches are disappearing. Today the inhabitants are developing tourism and other similar branches. Well-developed are the service sectors in Peshtani: trading, catering, transport. New private accommodation facilities are also being built.



64 View from existing road in Peshtani village



65 Ancient walls of the old Peshtani village



66 Holy Unmercenaries - St. Cosmas and Damian



67 Holy Trinity

RECEPTOR SENSITIVITY:	Negligible	The modified structure of the settlement, new buildings, people's habits make Peshtani a modern tourist resort
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IMPACT MAGNITUDE:	Building/fabric Moderate (beneficial)	With the construction of the expressway Peshtani will be better connected to Ohrid. That will help Peshtani to be a modern touristic settlement. In the center of this settlement a church is situated dedicated to the Holy Unmercenaries St. Cosmas and Damian. It was built in 1844 on an older sacred place. Also on the road from Peshtani to St Naum the church Holy Trinity is situated built in 1977.
	Context/settings No change	From the settlement the new road will not be seen, but it can be seen from the lake side. As for the traditions which are held in the settlement they will not have any interference because the new road is located above the village so they will not be hindered in any way.

		Impact magnitude				
		No change Context/settings	Negligible	Minor	Moderate Building/fabric	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight



68 Old photographs from the 1939, which is seen Ohrid and beginning section of the new route



69 Old photographs from the 1960s, which is seen Peshtani and end section where passes the new route

6. Mitigation and significant residual effects

Approaching to the individual impacts, and in the function of increase or decrease of the magnitude, depending whether it is beneficial or adverse during the analysis that follows the results for no *change* and *negligible* will not be discussed because those do not change the characteristic of cultural heritage or the area in general. We suggest several mitigation measures and decisions only for magnitude of at least minor or moderate.

OVERALL IMPACT MAGNITUDE				
No change	Negligible	Minor	Moderate	Major
12	10	11	1	
S	SA	FB	FB	
S	FA	SA		
F	FA	SA		
F	FB	SA		
S	FB	SA		
F	FB	FA		
F	FB	SA		
S	FB	SA		
F	FB	SA		
S	FA	SA		
S		SA		
S		SA		
Building/fabric - 5 Context/setting - 7	Building/fabric - 9 Beneficial - 6 Adverse - 3 Context/setting - 1 Adverse - 1	Building/fabric - 2 Beneficial - 1 Adverse - 1 Context/setting - 9 Adverse - 9	Building/fabric - 1 Beneficial - 1 Context/setting - 0	

F= Building/fabric
S = Context/setting
B = Beneficial
A = Adverse

Impact / Issue	Mitigation measure
Increased communication between Ohrid and the settlements along the route	<ul style="list-style-type: none"> - Shortened travel time; - Increased labor market; - An integrated market of tourist and catering services (due to the improved communication of the whole region); - Improved access to the social and health services.
Authenticity / diminished cultural landscape	<ul style="list-style-type: none"> - Horticultural arrangement of embankments and incisions; - Planting rows of trees along the expressway as a buffer zone (audio, visual insulation); - Placing lights for night driving, which will be focused on the road and will have protective covering facing the environment; - Protective net colored in green; - Optical modifications on the surface of the viaducts and galleries with application on uneven surfaces in order to reduce the effect of large flat concrete surfaces, it is good for sound resonance because it breaks up the sound.
Improved functional connections for the purpose of increased integrity of OUV	<ul style="list-style-type: none"> - Setting up information boards and signs for the monuments along the route; - Setting up billboards for tourist and catering services along the route; - Reduced traffic on the old road and using it for alternative types of transport (bicycles, walking); - Rural development programs based on improved functional connection.
Deteriorated panoramic views of the monument to the lake and of the lake to the lake	<ul style="list-style-type: none"> - In the settlements and monuments which are above the road there is no possibility for prevention and reduction of the negative effects which mean changed panoramic image with the appearance of the road in the line of view from the lake and the city of Ohrid; - The degraded views towards the individual monuments and settlements will mitigate using the previous mentioned measures of authenticity.
Loud noise because of the proximity of several monuments (church St. Minas, church St. George) to the route	<ul style="list-style-type: none"> - Setting up sound barriers for decreasing the noise

7. Conclusions and recommendations

The region of Ohrid as part of the World Natural and Cultural Heritage is sensitive to changes and economic growth, but both are inevitable and desirable for the development of the area itself. The danger derives from the uncontrolled and improper change of the character and meaning of the protected area caused by development. One of the characteristics of the region is its cultural landscape as an unbreakable bond between nature and human existence in this region. It can be said that although the construction of the Expressway Ohrid - Peshtani disturbs the visual effect, mainly if viewed from the side of the city of Ohrid, from the Lake and from Albania, it will not adversely affect

the Outstanding Universal Value (OUV) of the region; not in such volume for compromising its vital values. Over time the negative visual impact will be reduced by forming a natural patina of the incisions along the direction of the road. However, the benefits for the local population, as well as for the region and the Republic of Macedonia in general, will be increased through encouraging the revitalization and rural development. Furthermore, the traffic pressure on the existing roads that pass through the settlements along the coastline will be reduced, while maximizing the economic benefits through triggering a greater flow of people and goods to the final destinations in this part of the region. The newly created connections, enabled by the built Expressway Ohrid - Peshtani, as well as the new deviations directed towards the populated areas, will improve the accessibility of the settlements in the region. Regarding the individual cultural goods and sites, the construction of the road does not directly affect their immediate protection.

In the forthcoming period, the region that is subject to analysis, as well as the entire space of the region which is under protection, must be treated in terms of controlled development. This means that changes in the space, such as in this case, should be anticipated as well as evaluated from the point of view of their impacts on key values of the entire area. The integrity and authenticity of the area as a whole, as well as of its individual parts during any more significant intervention must be carefully considered. Such HIA/ESIA analyses must also be applied at the level of spatial and urban plans that either have been prepared, or are in the course of preparation, as well as during any significant investment in the domain of infrastructure, but also in the areas of economy and tourism. The development processes that must be conducted in this region should comply with the registered values and relations, especially the link between nature and culture as the outcome of an everlasting process of symbiosis between man and nature.